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#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Parts 52 and 81

[EPA-R09-OAR-2012-0781; FRL-9917-86-Region 9]

Approval and Promulgation of Implementation Plans; Designation of Areas for Air Quality Planning Purposes; State of California; PM<sub>2.5</sub>; Redesignation of Yuba City-Marysville to Attainment; Approval of PM<sub>2.5</sub> Redesignation Request and Maintenance Plan for Yuba City-Marysville

**AGENCY**: Environmental Protection Agency.

**ACTION**: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve, as a revision of the California state implementation plan (SIP), the State's request to redesignate the Yuba City-Marysville nonattainment area to attainment for the 2006 24-hour fine particulate matter (PM<sub>2.5</sub>) National Ambient Air Quality Standard. EPA is also proposing to approve the PM<sub>2.5</sub> maintenance plan and the associated motor vehicle emissions budgets for use in transportation conformity determinations necessary for the Yuba City-Marysville area. Finally, EPA is proposing to approve the attainment year emissions inventory. EPA is proposing this action because the SIP revision meets the requirements of the Clean Air Act and EPA guidance for such plans and motor vehicle emissions budgets.

**DATES**: Comments must be received on or before [Federal Register: Insert date 30 days after the publication date].

**ADDRESSES**: Submit your comments, identified by Docket ID Number EPA-R09-OAR-2012-0781, by one of the following methods:

- 1. http://www.regulations.gov: Follow the on-line instructions for submitting comments.
- 2. Email: ungvarsky.john@epa.gov

3. Mail or deliver: John Ungvarsky (AIR-2), U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901. Deliveries are only accepted during the Regional Office's normal hours of operation.

Instructions: All comments will be included in the public docket without change and may be made available online at http://www.regulations.gov, including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through http://www.regulations.gov or email. http://www.regulations.gov is an anonymous access system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send email directly to EPA, your email address will be automatically captured and included as part of the public comment. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Docket: The index to the docket and documents in the docket for this action are generally available electronically at www.regulations.gov and in hard copy at EPA Region IX, 75

Hawthorne Street, San Francisco, California. While all documents in the docket are listed at www.regulations.gov, some information may be publicly available only at the hard copy location (e.g., copyrighted material, large maps), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

## FOR FURTHER INFORMATION CONTACT: John Ungvarsky, Air Planning Office (AIR-

2), U.S. Environmental Protection Agency, Region IX, (415) 972-3963,

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**SUPPLEMENTARY INFORMATION**: Throughout this document, "we," "us," or "our" refer to EPA. This supplementary information section is arranged as follows:

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## I. Summary of Today's Proposed Action

Under Clean Air Act (CAA or "the Act") section 107(d)(3)(D), EPA is proposing to approve the State's request to redesignate the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area to attainment for the 2006 24-hour PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS or "standard"). We are doing so based on our conclusion that the area has met the five criteria for redesignation under CAA section 107(d)(3)(E): 1) that the area has attained the 24-hour PM<sub>2.5</sub> NAAQS in the 2009-2011 time period and that the area continues to attain the PM<sub>2.5</sub> standard since that time; 2) that relevant portions of the California SIP are fully approved; 3) that the improvement in air quality is due to permanent and enforceable reductions in emissions; 4) that California has met all requirements applicable to the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area with respect to section 110 and part D of the CAA; and 5) that the *Yuba City-Marysville PM<sub>2.5</sub> Redesignation Request and Maintenance Plan* ("Yuba City-Marysville PM<sub>2.5</sub> Plan" or "Plan")<sup>1</sup> meets the requirements of section 175A of the CAA.

In addition, under section 110(k)(3) of the CAA, EPA is proposing to approve the Yuba City-Marysville PM<sub>2.5</sub> Plan including the motor vehicle emissions budgets (MVEBs) as a revision to the California SIP because we find the MVEBs meet the applicable transportation conformity requirements under 40 CFR 93.118(e). EPA finds that the maintenance demonstration shows

<sup>&</sup>lt;sup>1</sup> See letter from Richard W. Corey, Executive Officer, California Air Resources Board, to Jared Blumenfeld, Regional Administrator, EPA Region 9, dated May 23, 2013, with attachments.

how the area will continue to attain the 24-hour PM<sub>2.5</sub> NAAQS for at least 10 years beyond redesignation (i.e., through 2023) and that the contingency provisions describing the actions that the Feather River Air Quality Management District (FRAQMD) will take in the event of a future monitored violation meet all applicable requirements for maintenance plans and related contingency provisions in section 175A of the CAA. Finally, EPA is proposing to approve the attainment year emissions inventory under section 172(c)(3) of the CAA.

EPA is proposing these actions because the SIP revision meets the requirements of the CAA and EPA guidance for such plans and budgets.

#### II. What is the Background for this Action?

## A. The $PM_{2.5}$ NAAQS

Under section 109 of the CAA, EPA has established national ambient air quality standards for certain pervasive air pollutants (referred to as "criteria pollutants") and conducts periodic reviews of the NAAQS to determine whether they should be revised or whether new NAAQS should be established. EPA sets the NAAQS for certain ambient air pollutants at levels required to protect public health and welfare. PM<sub>2.5</sub> is one of these ambient air pollutants for which EPA has established health-based standards.

On July 18, 1997, EPA revised the NAAQS for particulate matter to add new standards for  $PM_{2.5}$ , using  $PM_{2.5}$  as the indicator for the pollutant. EPA established primary and secondary<sup>2</sup> annual and 24-hour standards for  $PM_{2.5}$  (62 FR 38652). The annual standard was set at 15.0 micrograms per cubic meter ( $\mu g/m^3$ ), based on a 3-year average of annual mean  $PM_{2.5}$  concentrations, and the 24-hour standard was set at 65  $\mu g/m^3$ , based on the 3-year average of the

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<sup>&</sup>lt;sup>2</sup> For a given air pollutant, "primary" national ambient air quality standards are those determined by EPA as requisite to protect the public health, and "secondary" standards are those determined by EPA as requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. See CAA section 109(b).

98th percentile of 24-hour PM<sub>2.5</sub> concentrations at each population-oriented monitor within an area.

On October 17, 2006 (71 FR 61144), EPA revised the level of the 24-hour PM<sub>2.5</sub> NAAQS to  $35 \mu g/m^3$ , based on a 3-year average of the 98th percentile of 24-hour concentrations. EPA also retained the 1997 annual PM<sub>2.5</sub> standard at 15.0  $\mu g/m^3$  based on a 3-year average of annual mean PM<sub>2.5</sub> concentrations, but with tighter constraints on the spatial averaging criteria.

### B. Designation of $PM_{2.5}$ Nonattainment Areas

Effective December 14, 2009, EPA established the initial air quality designations for most areas in the United States for the 2006 24-hour PM<sub>2.5</sub> NAAQS. See 74 FR 58688, (November 13, 2009). Among the various areas designated in 2009, EPA designated the Yuba City-Marysville area in California as nonattainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS.<sup>3</sup> The boundaries for this area are described in 40 CFR 81.305.<sup>4</sup>

On January 10, 2013, at 78 FR 2211, EPA issued a determination that the Yuba City-Marysville nonattainment area attained the 2006 24-hour  $PM_{2.5}$  standard based on complete, quality-assured, and certified ambient air monitoring data for the 2009–2011 monitoring period. *C.*  $PM_{2.5}$  *Planning Requirements* 

Beginning in the 1970's and continuing to the present, the Feather River Air Quality Management District<sup>5</sup> and the California Air Resources Board (CARB) have adopted a number of rules to address planning requirements under the CAA, as amended in 1977. CARB submitted these rules and plans to EPA at various times, and EPA approved a number of them into the

<sup>&</sup>lt;sup>3</sup> With respect to the annual PM<sub>2.5</sub> NAAQS, this area is designated as "unclassifiable/attainment."

<sup>&</sup>lt;sup>4</sup> The Yuba City-Marysville PM<sub>2.5</sub> nonattainment area includes Sutter County and the southwestern two-thirds of Yuba County. This nonattainment area lies within the Sacramento Valley Air Basin and lies between the Chico PM<sub>2.5</sub> nonattainment area to the north and the Sacramento PM<sub>2.5</sub> nonattainment area to the south.

<sup>&</sup>lt;sup>5</sup> In 1991, the Sutter County Air Pollution Control District (APCD) and the Yuba County APCD combined to form the FRAQMD.

California SIP. An example of a rule adopted by FRAQMD and approved by EPA as a revision to the California SIP as part of the PM<sub>2.5</sub> control strategy in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area is Rule 3.22 - Internal Combustion Engines. Examples of rules adopted by CARB and approved by EPA as revisions to the California SIP that have reduced PM<sub>2.5</sub> in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area include: California Code of Regulations (CCR) Title 13, Section 1956.8 - Heavy Duty Vehicle Exhaust Emission Standards; CCR, Section 2262 - California Reformulated Gasoline Phase 2 and Phase 3 Standards; and CCR, Sections 2420-2427 - Heavy Duty Diesel Cycle Engines.

Within three years of the effective date of designations, states with areas designated as nonattainment for the 2006 PM<sub>2.5</sub> NAAQS are required to submit SIP revisions that, among other elements, provide for implementation of reasonably available control measures (RACM), reasonable further progress (RFP), attainment of the standard as expeditiously as practicable but no later than five years from the nonattainment designation (in this instance, no later than December 14, 2014), as well as contingency measures. See CAA section 172(a)(2), 172(c)(1), 172(c)(2), and 172(c)(9). Prior to the due date for submittal of these SIP revisions, the State of California requested that EPA make determinations that the Yuba City-Marysville<sup>6</sup> nonattainment area has attained the 2006 PM<sub>2.5</sub> NAAQS and that attainment-related SIP submittal requirements are not applicable for as long as the area continues to attain the standard. As described above, on January 10, 2013, at 78 FR 2211, EPA issued a final determination that the Yuba City-Marysville nonattainment area had attained the 2006 24-hour PM<sub>2.5</sub> standard. Pursuant to 40 CFR 51.1004(c) and based on this determination, the requirements for the Yuba City-Marysville nonattainment area to submit an attainment demonstration and associated

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<sup>&</sup>lt;sup>6</sup> On June 8, 2010, James Goldstene, Executive Officer of the California Air Resources Board, submitted a request to Jared Blumenfeld, Regional Administrator, U.S. EPA Region IX, to find the Yuba City – Marysville PM<sub>2.5</sub> nonattainment area had attained the 2006 24-hour PM<sub>2.5</sub> NAAQS.

RACM, a RFP plan, contingency measures, and other planning SIPs related to the attainment of either the 2006 24-hour PM<sub>2.5</sub> NAAQS are suspended until such time as: the area is redesignated to attainment for each standard, at which time the requirements no longer apply; or EPA determines that the area has again violated any of the standards, at which time such plans are required to be submitted. However, a determination of attainment does not preclude states from submitting and EPA from approving a SIP revision for the 2006 PM<sub>2.5</sub> standard.

On May 23, 2013, CARB submitted the Yuba City-Marysville PM<sub>2.5</sub> Plan and requested that EPA redesignate the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area to attainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS. On February 20, 2014, CARB submitted to EPA a technical supplement to the Yuba City-Marysville PM<sub>2.5</sub> Plan ("technical supplement").<sup>7</sup> We are proposing action today on CARB's May 23, 2013 submittal, including the Yuba City-Marysville PM<sub>2.5</sub> Plan, as supplemented by CARB on February 20, 2014.

In this proposed rulemaking action, EPA takes into account a 2013 decision by the United States Court of Appeals, District of Columbia Circuit (D.C. Circuit). On January 4, 2013, in *Natural Resources Defense Council ("NRDC")* v. *EPA*, the D.C. Circuit remanded to EPA the "Clean Air Fine Particle Implementation Rule" (72 FR 20586, April 25, 2007) and the "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM<sub>2.5</sub>)" final rule (73 FR 28321, May 16, 2008) (collectively, the "PM<sub>2.5</sub> Implementation Rule"). 706 F.3d 428 (D.C. Cir. 2013).

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<sup>&</sup>lt;sup>7</sup> On February 20, 2014, CARB submitted to EPA a technical supplement to the Yuba City-Marysville PM<sub>2.5</sub> Plan ("technical supplement"). The technical supplement included: a Staff Report titled "Minor Updates to Yuba City-Marysville PM<sub>2.5</sub> Maintenance Plan and Redesignation Request" ("CARB 2014 Staff Report"); a letter from Christopher D. Brown, Air Pollution Control Officer, FRAQMD to Deborah Jordan, Director, Air Division, USEPA Region 9, and Richard Corey, Executive Officer, CARB, clarify the contingency plan; a notice of February 20, 2014 public meeting to consider approval of minor updates to the Yuba City-Marysville PM<sub>2.5</sub> Maintenance Plan and Redesignation Request; transcripts from February 20, 2014 CARB Board meeting; and Board Resolution 14-6.

# III. Effect of the January 4, 2013, D.C. Circuit Decision Regarding PM<sub>2.5</sub> Implementation Under Subpart 4 of Part D of Title I of the Clean Air Act

## A. Background

As discussed above, on January 4, 2013, in *NRDC* v. *EPA*, the D.C. Circuit remanded to EPA the PM<sub>2.5</sub> Implementation Rule. The Court found that EPA erred in implementing the 1997 PM<sub>2.5</sub> NAAQS pursuant to the general implementation provisions of subpart 1 of part D of title I of the CAA (subpart 1), rather than the particulate-matter-specific provisions of subpart 4 of Part D of Title I (subpart 4).

Prior to the January 4, 2013 decision, the states had worked towards meeting the air quality goals of the 1997 and 2006 PM<sub>2.5</sub> NAAQS in accordance with the EPA regulations and guidance derived from subpart 1 of Part D of Title I of the CAA. In rulemaking that responds to the Court's remand, EPA takes this history into account by setting a new deadline for any remaining submissions that may be required of moderate nonattainment areas as a result of the Court's decision regarding subpart 4. See 78 FR 69806 (November 21, 2013). On June 2, 2014, EPA finalized the PM<sub>2.5</sub> Subpart 4 Nonattainment Classification and Deadline Rule, which identifies the classification under subpart 4 for areas currently designated nonattainment for the 1997 and/or 2006 PM<sub>2.5</sub> standards. See 79 FR 31566. EPA's final rulemaking also sets deadlines for states to submit attainment-related and NSR SIP elements required for these areas pursuant to subpart 4, and identifies the EPA guidance that is currently available regarding subpart 4 requirements. See 78 FR 69806 (November 21, 2013). This final rule sets a deadline for States to submit attainment plans and meet other subpart 4 requirements. The final rule specifies December 31, 2014 as the deadline for the states to submit any additional attainment-related SIP elements that may be needed to meet the applicable requirements of subpart 4 for areas currently

designated nonattainment for the 1997 and/or 2006 PM<sub>2.5</sub> NAAQS and to submit SIPs addressing the nonattainment NSR requirements in subpart 4. Therefore, for California, any additional attainment-related SIP elements that may be needed for the Yuba City-Marysville nonattainment area to meet the requirements of subpart 4 were not due at the time that California submitted the Yuba City-Marysville PM<sub>2.5</sub> Plan.

### B. Proposal on This Issue

In this portion of the proposed redesignation, EPA addresses the effect of the Court's January 4, 2013 ruling and the PM<sub>2.5</sub> Subpart 4 Nonattainment Classification and Deadline Rule (79 FR 31566, June 2, 2014) on the proposed redesignation. As explained below, EPA is proposing to determine that the Court's January 4, 2013, decision does not prevent EPA from redesignating the Yuba City-Marysville nonattainment area to attainment for the 2006 24-hour PM 2.5 NAAQS. Even in light of the Court's decision, redesignation for this area is appropriate under the CAA and EPA's longstanding interpretations of the CAA's provisions regarding redesignation. EPA first explains its longstanding interpretation that requirements that are imposed, or that become due, after a complete redesignation request is submitted for an area that is attaining the standard, are not applicable for purposes of evaluating a redesignation request. Second, EPA then shows that, even if EPA applies the subpart 4 requirements to the Yuba City-Marysville PM<sub>2.5</sub> Plan and disregards the provisions of its PM<sub>2.5</sub> Implementation Rule recently remanded by the Court, the state's request for redesignation of this area still qualifies for approval. EPA's discussion takes into account the effect of the Court's ruling and the PM<sub>2.5</sub> Subpart 4 Nonattainment Classification and Deadline Rule (79 FR 31566, June 2, 2014) on the area's maintenance plan, which EPA views as approvable when subpart 4 requirements are considered.

1. Applicable Requirements for Purposes of Evaluating the Redesignation Request

With respect to the PM<sub>2.5</sub> Implementation Rule, the Court's January 4, 2013 ruling rejected EPA's reasons for implementing the PM<sub>2.5</sub> NAAQS solely in accordance with the provisions of subpart 1, and remanded that matter to EPA, so that it could address implementation of the 1997 PM<sub>2.5</sub> NAAQS under subpart 4 of Part D of the CAA, in addition to subpart 1. For the purposes of evaluating California's redesignation request for the Yuba City-Marysville nonattainment area, to the extent that implementation under subpart 4 would impose additional requirements for areas designated nonattainment, EPA believes that those requirements are not "applicable" for the purposes of CAA section 107(d)(3)(E), and thus EPA is not required to consider subpart 4 requirements with respect to the Yuba City-Marysville redesignation. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean, as a threshold matter, that the part D provisions which are "applicable" and which must be approved in order for EPA to redesignate an area include only those which came due prior to a state's submittal of a complete redesignation request. See "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (Calcagni memorandum). See also "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992," Memorandum from Michael Shapiro, Acting Assistant Administrator, Air and Radiation, September 17, 1993 (Shapiro memorandum); Final Redesignation of Detroit-Ann Arbor, (60 FR 12459, 12465-66, March 7, 1995); Final Redesignation of St. Louis, Missouri, (68 FR 25418, 25424-27, May 12, 2003); Sierra Club v. EPA, 375 F.3d 537, 541 (7th Cir. 2004) (upholding EPA's redesignation rulemaking applying this interpretation and expressly rejecting Sierra Club's view that the meaning of "applicable" under the statute is "whatever should have

been in the plan at the time of attainment rather than whatever actually was in the plan and already implemented or due at the time of attainment").<sup>8</sup> In this case, at the time that California submitted its redesignation request, requirements under subpart 4 were not due.

EPA's view that, for purposes of evaluating the Yuba City-Marysville PM<sub>2.5</sub> Plan, the subpart 4 requirements were not due at the time the State submitted the redesignation request is in keeping with the EPA's interpretation of subpart 2 requirements for subpart 1 ozone areas redesignated subsequent to the D.C. Circuit's decision in South Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882 (D.C. Cir. 2006). In South Coast, the Court found that EPA was not permitted to implement the 1997 8-hour ozone standard solely under subpart 1, and held that EPA was required under the statute to implement the standard under the ozone-specific requirements of subpart 2 as well. Subsequent to the South Coast decision, in evaluating and acting upon redesignation requests for the 1997 8-hour ozone standard that were submitted to EPA for areas under subpart 1, EPA applied its longstanding interpretation of the CAA that "applicable requirements", for purposes of evaluating a redesignation, are those that had been due at the time the redesignation request was submitted. See, e.g., Proposed Redesignation of Manitowoc County and Door County Nonattainment Areas (75 FR 22047, 22050, April 27, 2010). In those actions, EPA therefore did not consider subpart 2 requirements to be "applicable" for the purposes of evaluating whether the area should be redesignated under section 107(d)(3)(E) of the CAA.

EPA's interpretation derives from the provisions of section 107(d)(3) of the CAA. Section 107(d)(3)(E)(v) states that, for an area to be redesignated, a state must meet "all requirements

<sup>&</sup>lt;sup>8</sup> Applicable requirements of the CAA that come due subsequent to the area's submittal of a complete redesignation request remain applicable until a redesignation is approved, but are not required as a prerequisite to redesignation. CAA section 175A(c).

'applicable' to the area under section 110 and part D." Section 107(d)(3)(E)(ii) provides that the EPA must have fully approved the "applicable" SIP for the area seeking redesignation. These two sections read together support EPA's interpretation of "applicable" as only those requirements that came due prior to submission of a complete redesignation request. First, holding states to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request, in order to be redesignated, would make it problematic or impossible for EPA to act on redesignation requests in accordance with the 18-month deadline Congress set for EPA action in section 107(d)(3)(D). If "applicable requirements" were interpreted to be a continuing flow of requirements with no reasonable limitation, states, after submitting a redesignation request, would be forced continuously to make additional SIP submissions that in turn would require EPA to undertake further notice-and-comment rulemaking actions to act on those submissions. This would create a regime of unceasing rulemaking that would delay action on the redesignation request beyond the 18-month timeframe provided by the Act for this purpose.

Second, a fundamental premise for redesignating a nonattainment area to attainment is that the area has attained the relevant NAAQS due to emission reductions from existing controls. Thus, an area for which a redesignation request has been submitted would have already attained the NAAQS as a result of satisfying statutory requirements that came due prior to the submission of the request. Absent a showing that unadopted and unimplemented requirements are necessary for future maintenance, it is reasonable to view the requirements applicable for purposes of evaluating the redesignation request as including only those SIP requirements that have already come due. These are the requirements that led to attainment of the NAAQS. To require, for redesignation approval, that a state also satisfy additional SIP requirements coming due after the

state submits its complete redesignation request, and while EPA is reviewing it, would compel the state to do more than is necessary to attain the NAAQS, without a showing that the additional requirements are necessary for maintenance.

In the context of this redesignation, the timing and nature of the Court's January 4, 2013 decision in *NRDC v. EPA* and EPA's PM<sub>2.5</sub> Subpart 4 Nonattainment Classification and Deadline Rule (79 FR 31566, June 2, 2014) compound the consequences of imposing requirements that come due after the redesignation request is submitted. The State submitted its redesignation request on May 23, 2013, which is prior to the deadline by which the Yuba City-Marysville nonattainment area is required to meet the attainment plan and other requirements pursuant to subpart 4.

To evaluate the State's fully-completed and pending redesignation request to comply now with requirements of subpart 4 that the Court announced only in January 2013, would be to give retroactive effect to such requirements and contravene EPA's longstanding interpretation of applicable requirements for purposes of redesignation. The D.C. Circuit recognized the inequity of this type of retroactive impact in *Sierra Club v. Whitman*, 285 F.3d 63 (D.C. Cir. 2002), where it upheld the District Court's ruling refusing to make retroactive EPA's determination that the St. Louis area did not meet its attainment deadline. In that case, petitioners urged the Court to make EPA's nonattainment determination effective as of the date that the statute required, rather than the later date on which EPA actually made the determination. The Court rejected this view, stating that applying it "would likely impose large costs on States, which would face fines and suits for not implementing air pollution prevention plans . . . even though they were not on notice

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<sup>&</sup>lt;sup>9</sup>Sierra Club v. Whitman was discussed and distinguished in a recent D.C. Circuit decision that addressed retroactivity in a quite different context, where, unlike the situation here, EPA sought to give its regulations retroactive effect. *National Petrochemical and Refiners Ass'n v. EPA*. 630 F.3d 145, 163 (D.C. Cir. 2010), rehearing denied 643 F.3d 958 (D.C. Cir. 2011), cert denied 132 S. Ct. 571 (2011).

at the time." *Id.* at 68. Similarly, it would be unreasonable to penalize the State of California by rejecting its redesignation request for an area that is already attaining the 2006 24-hour PM<sub>2.5</sub> standard and that met all applicable requirements known to be in effect at the time of the request. For EPA now to reject the redesignation request solely because the State did not expressly address subpart 4 requirements which have not yet come due and for which it had little to no notice, would inflict the same unfairness condemned by the Court in *Sierra Club v. Whitman*.

### 2. Subpart 4 Requirements and California's Redesignation Request

Even if EPA were to take the view that the Court's January 4, 2013, decision requires that, in the context of a pending redesignation for the 2006 24-hour PM<sub>2.5</sub> standard, subpart 4 requirements were due and in effect at the time the State submitted its redesignation request, EPA proposes to determine that the Yuba City-Marysville area still qualifies for redesignation to attainment of the 2006 24-hour PM<sub>2.5</sub> standard. As explained below, EPA believes that the redesignation request for the Yuba City-Marysville nonattainment area, though not expressed in terms of subpart 4 requirements, substantively meets the requirements of that subpart for purposes of redesignating the area to attainment for the 2006 24-hour PM2.5 NAAQS.

With respect to evaluating the relevant substantive requirements of subpart 4 for purposes of redesignating the Yuba City-Marysville nonattainment area, EPA notes that subpart 4 incorporates components of subpart 1 of part D, which contains general air quality planning requirements for areas designated as nonattainment. *See* section 172(c). Subpart 4 itself contains specific planning and scheduling requirements for PM<sub>10</sub><sup>10</sup> nonattainment areas, and under the Court's January 4, 2013, decision in *NRDC v. EPA*, these same statutory requirements also apply for PM<sub>2.5</sub> nonattainment areas. EPA has longstanding general guidance that interprets the 1990 amendments to the CAA, making recommendations to states for meeting the statutory

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 $<sup>^{10}</sup>$  PM $_{10}$  refers to particulates nominally 10 micrometers in diameter or smaller.

requirements for SIPs for nonattainment areas. *See*, "State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," 57 FR 13498 (April 16, 1992) (the "General Preamble"). In the General Preamble, EPA discussed the relationship of subpart 1 and subpart 4 SIP requirements, and pointed out that subpart 1 requirements were to an extent "subsumed by, or integrally related to, the more specific PM<sub>10</sub> requirements." 57 FR 13538 (April 16, 1992). The subpart 1 requirements include, among other things, provisions for attainment demonstrations, RACM, RFP, emissions inventories, and contingency measures.

For the purposes of this redesignation, in order to identify any additional requirements which would apply under subpart 4, consistent with EPA's PM<sub>2.5</sub> Subpart 4 Nonattainment Classification and Deadline Rule (79 FR 31566, June 2, 2014), we are considering the Yuba City-Marysville nonattainment area to be a "moderate" PM<sub>2.5</sub> nonattainment area. As EPA explained in its June 2, 2014 rule, section 188 of the CAA provides that all designated nonattainment areas under subpart 4 are initially be classified by operation of law as "moderate" nonattainment areas, and remain moderate nonattainment areas unless and until EPA reclassifies the area as a "serious" nonattainment area. Accordingly, EPA believes that it is appropriate to limit the evaluation of the potential impact of subpart 4 requirements to those that would be applicable to moderate nonattainment areas. Sections 189(a) and (c) of subpart 4 apply to moderate nonattainment areas and include the following: (1) an approved permit program for construction of new and modified major stationary sources (section 189(a)(1)(A)); (2) an attainment demonstration (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); and (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date (section 189(c)).

The permit requirements of subpart 4, as contained in section 189(a)(1)(A), refer to and apply the subpart 1 permit provisions requirements of sections 172 and 173 to PM<sub>10</sub>, without adding to them. Consequently, EPA believes that section 189(a)(1)(A) does not itself impose for redesignation purposes any additional requirements for moderate areas beyond those contained in subpart 1.<sup>11</sup> In any event, in the context of redesignation, EPA has long relied on the interpretation that a fully approved nonattainment NSR program is not considered an applicable requirement for redesignation, provided the area can maintain the standard with a prevention of significant deterioration (PSD) program after redesignation. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas
Requesting Redesignation to Attainment" ("Nichols memorandum"). *See also* rulemakings for Detroit, Michigan (60 FR 12467–12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469–20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834–31837, June 21, 1996).

With respect to the specific attainment planning requirements under subpart 4,<sup>12</sup> when EPA evaluates a redesignation request under either subpart 1 and/or 4, any area that is attaining the PM<sub>2.5</sub> standard is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-linked requirements as not applicable for areas attaining the standard. In the General Preamble, EPA stated that:

"The requirements for RFP will not apply in evaluating a request for redesignation to attainment since, at a minimum, the air quality data for the area must show that the area has

<sup>11</sup> The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.

<sup>&</sup>lt;sup>12</sup> I.e., attainment demonstration, RFP, RACM, milestone requirements, contingency measures.

already attained. Showing that the State will make RFP towards attainment will, therefore, have no meaning at that point." 57 FR 13564.

The General Preamble also explained that "[t]he section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date. These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans . . . provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas." *Id*.

EPA similarly stated in its 1992 Calcagni memorandum that, "The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard."

It is evident that even if we were to consider the Court's January 4, 2013, decision in *NRDC v. EPA* to mean that attainment-related requirements specific to subpart 4 should be imposed retroactively<sup>13</sup> and, or prior to December 31, 2014 and, thus, were due prior to the State's redesignation request, those requirements do not apply to an area that is attaining the 1997 and 2006 PM<sub>2.5</sub> standards, for the purpose of evaluating a pending request to redesignate the area to attainment. EPA has consistently enunciated this interpretation of applicable requirements under section 107(d)(3)(E) since the General Preamble was published more than twenty years ago. Courts have recognized the scope of EPA's authority to interpret "applicable requirements" in the redesignation context. See *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004).

Moreover, even outside the context of redesignations, EPA has viewed the obligations to submit attainment-related SIP planning requirements of subpart 4 as inapplicable for areas that EPA determines are attaining the 2006 24-hour PM<sub>2.5</sub> standard. EPA's prior "Clean Data Policy"

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<sup>&</sup>lt;sup>13</sup> As EPA has explained previously, we do not believe that the Court's January 4, 2013 decision should be interpreted so as to impose these requirements on the states retroactively. *Sierra Club* v. *Whitman, supra.* 

rulemakings for the PM<sub>10</sub> NAAQS, also governed by the requirements of subpart 4, explain EPA's reasoning. They describe the effects of a determination of attainment on the attainment-related SIP planning requirements of subpart 4. See "Determination of Attainment for Coso Junction Nonattainment Area," (75 FR 27944, May 19, 2010). *See also* Coso Junction proposed PM<sub>10</sub> redesignation, (75 FR 36023, 36027, June 24, 2010); Proposed and Final Determinations of Attainment for San Joaquin Nonattainment Area (71 FR 40952, 40954–55, July 19, 2006; and 71 FR 63641, 63643–47 October 30, 2006). In short, EPA in this context has also long concluded that to require states to meet superfluous SIP planning requirements is not necessary and not required by the CAA, so long as those areas continue to attain the relevant NAAQS.

On January 10, 2013, at 78 FR 2211, EPA issued a final determination that the Yuba City-Marysville nonattainment area attained the 2006 24-hour PM<sub>2.5</sub> standard based on complete, quality-assured, and certified ambient air monitoring data for the 2009–2011 monitoring period. Elsewhere in this notice, EPA proposes to determine that the area continues to attain the 2006 24-hour PM<sub>2.5</sub> standard. Under its longstanding interpretation, EPA is proposing to determine here that the area meets the attainment-related plan requirements of subparts 1 and 4. Thus, EPA is proposing to conclude that the requirements to submit an attainment demonstration under 189(a)(1)(B), a RACM determination under section 172(c)(1) and section 189(a)(1)(c), a RFP demonstration under 189(c)(1), and contingency measure requirements under section 172(c)(9) are satisfied for purposes of evaluating the redesignation requests.

## 3. Subpart 4 and Control of PM<sub>2.5</sub> Precursors

The D.C. Circuit in *NRDC v. EPA* remanded to EPA the two rules at issue in the case with instructions to EPA to re-promulgate them consistent with the requirements of subpart 4. EPA in this section addresses the Court's opinion with respect to PM<sub>2.5</sub> precursors. While past

implementation of subpart 4 for  $PM_{10}$  has allowed for control of  $PM_{10}$  precursors such as oxides of nitrogen ( $NO_X$ ) from major stationary, mobile, and area sources in order to attain the standard as expeditiously as practicable, CAA section 189(e) specifically provides that control requirements for major stationary sources of direct  $PM_{10}$  shall also apply to  $PM_{10}$  precursors from those sources, except where EPA determines that major stationary sources of such precursors "do not contribute significantly to  $PM_{10}$  levels which exceed the standard in the area."

EPA's 1997 PM<sub>2.5</sub> Implementation Rule, remanded by the D.C. Circuit, contained rebuttable presumptions concerning certain PM<sub>2.5</sub> precursors (e.g., volatile organic compounds (VOCs)) applicable to attainment plans and control measures related to those plans. Specifically, in 40 CFR 51.1002, EPA provided, among other things, that a state was "not required to address VOC [and ammonia] as . . . PM<sub>2.5</sub> attainment plan precursor[s] and to evaluate sources of VOC [and ammonia] emissions in the State for control measures." EPA intended these to be rebuttable presumptions. EPA established these presumptions at the time because of uncertainties regarding the emission inventories for these pollutants and the effectiveness of specific control measures in various regions of the country in reducing PM<sub>2.5</sub> concentrations. EPA also left open the possibility for such regulation of VOC and ammonia in specific areas where that was necessary.

The Court in its January 4, 2013, decision made reference to both section 189(e) and 40 CFR 51.1002, and stated that, "In light of our disposition, we need not address the petitioners' challenge to the presumptions in [40 CFR 51.1002] that volatile organic compounds and ammonia are not PM<sub>2.5</sub> precursors, as subpart 4 expressly governs precursor presumptions." *NRDC v. EPA*, at 27, n.10.

Elsewhere in the Court's opinion, however, the Court observed,

"Ammonia is a precursor to fine particulate matter, making it a precursor to both PM<sub>2.5</sub> and PM<sub>10</sub>. For a PM<sub>10</sub> nonattainment area governed by subpart 4, a precursor is presumptively regulated. See 42 U.S.C. 7513a(e) [section 189(e)]." *Id.* at 21, n.7.

For a number of reasons, EPA believes that its proposed redesignation of the Yuba City-Marysville nonattainment area is consistent with the Court's decision on this aspect of subpart 4. First, while the Court, citing section 189(e), stated that "for a PM<sub>10</sub> area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's PM<sub>2.5</sub> Implementation Rule provisions regarding ammonia and VOC as precursors. The Court had no occasion to reach whether and how it was substantively necessary to regulate any specific precursor in a particular PM<sub>2.5</sub> nonattainment area, and did not address what might be necessary for purposes of acting upon a redesignation request.

However, even if EPA takes the view that the requirements of subpart 4 were deemed applicable at the time the state submitted the redesignation request, and disregards the implementation rule's rebuttable presumptions regarding ammonia and VOC as PM<sub>2.5</sub> precursors (and any similar provisions reflected in the guidance for the 2006 PM<sub>2.5</sub> standard), the regulatory consequence would be to consider the need for regulation of all precursors from any sources in the area to demonstrate attainment and to apply the section 189(e) provisions to major stationary sources of precursors. In the case of the Yuba City-Marysville nonattainment area, EPA believes that doing so is consistent with proposing redesignation of the area for the 2006 24-hour PM<sub>2.5</sub> standard. The Yuba City-Marysville nonattainment area has attained the 2006 24-hour PM<sub>2.5</sub> standard without any specific additional controls of VOC and ammonia emissions from any major sources in the area.<sup>14</sup>

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<sup>&</sup>lt;sup>14</sup> The southern portion of Sutter County is also within the Sacramento Metro ozone nonattainment area (SMA), which is classified as Severe-15 for the 1997 and 2008 8-hour ozone standards. In 40 CFR 81.305, the portion of

Precursors in subpart 4 are specifically regulated under the provisions of section 189(e). which requires, with important exceptions, control requirements for major stationary sources of PM<sub>10</sub> precursors. <sup>15</sup> Under subpart 1 and EPA's prior implementation rule, all major stationary sources of PM<sub>2.5</sub> precursors were subject to regulation, with the exception of ammonia and VOC. Thus we must address here whether additional controls of ammonia and VOC from major stationary sources are required under section 189(e) of subpart 4 in order to redesignate the area for the 2006 24-hour PM<sub>2.5</sub> standard. As explained below, we do not believe that any additional controls of ammonia and VOC are required in the context of this redesignation.

In the General Preamble, EPA discusses its approach to implementing section 189(e). See 57 FR 13538–13542. With regard to precursor regulation under section 189(e), the General Preamble explicitly stated that control of VOC under other CAA requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e). See 57 FR 13542. In this proposed rulemaking action, EPA proposes to determine that the SIP has met the provisions of section 189(e) with respect to ammonia and VOC as precursors. This proposed determination is based on our findings that (1) the Yuba City-Marysville nonattainment area contains no major stationary sources of ammonia, and (2) existing major stationary sources of VOC are adequately controlled under other provisions of the CAA regulating the ozone NAAQS. 16 In the alternative, EPA proposes to determine that, under the express exception provisions of section 189(e), and in the context of the redesignation of the area, which is

Sutter County within the SMA boundaries includes the portion south of a line connecting the northern border of Yolo County to the SW tip of Yuba County and continuing along the southern Yuba County border to Placer County. Sources within the SMA are subject to CAA requirements for NOx and VOC that may be in addition to any requirements relating to the 2006 24-hour PM<sub>2.5</sub> standard.

<sup>&</sup>lt;sup>15</sup> Under either subpart 1 or subpart 4, for purposes of demonstrating attainment as expeditiously as practicable, a state is required to evaluate all economically and technologically feasible control measures for direct PM emissions that are deemed reasonably available.

<sup>&</sup>lt;sup>16</sup> The Yuba City-Marysville area has reduced VOC emissions through the implementation of various control programs including VOC Reasonably Available Control Technology regulations and various on-road and non-road motor vehicle control programs.

attaining the 2006 24-hour PM<sub>2.5</sub> standard, at present ammonia and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 2006 24-hour PM<sub>2.5</sub> standard in the Yuba City-Marysville nonattainment area. <sup>17</sup> See 57 FR 13539–42.

EPA notes that its PM<sub>2.5</sub> Implementation Rule provisions in 40 CFR 51.1002 were not directed at evaluation of PM<sub>2.5</sub> precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 PM<sub>2.5</sub> NAAQS. By contrast, redesignation to attainment primarily requires the area to have already attained due to permanent and enforceable emission reductions, and to demonstrate that controls in place can continue to maintain the standard. Thus, even if we regard the Court's January 4, 2013, decision as calling for "presumptive regulation" of ammonia and VOC for PM<sub>2.5</sub> under the attainment planning provisions of subpart 4, those provisions in and of themselves do not require additional controls of these precursors for an area that already qualifies for redesignation. Nor does EPA believe that requiring California to address precursors differently than they have already would result in a substantively different outcome.

Although, as EPA has emphasized, its consideration here of precursor requirements under subpart 4 is in the context of a redesignation to attainment, EPA's existing interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM<sub>10</sub> contemplates that states may develop attainment plans that regulate only those precursors that are necessary for purposes of attainment in the area in question, i.e., states may determine that only certain precursors need be regulated for attainment and control purposes.<sup>18</sup> Courts have upheld this

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<sup>&</sup>lt;sup>17</sup> In the Plan, FRAQMD and CARB indicate that based on analyses of inventories and the area attaining without the need for additional measures to control of ammonia and VOCs, emissions of ammonia and VOCs from sources in the Yuba City-Marysville nonattainment area are an insignificant contributor to secondary particulate formation in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area. See pages VI-1 in the Yuba City-Marysville PM<sub>2.5</sub> Plan.

<sup>18</sup> See, e.g., "Approval and Promulgation of Implementation Plans for California—San Joaquin Valley PM–10 Nonattainment Area; Serious Area Plan for Nonattainment of the 24-Hour and Annual PM–10 Standards," 69 FR

approach to the requirements of subpart 4 for PM<sub>10</sub>. <sup>19</sup> EPA believes that application of this approach to PM<sub>2.5</sub> precursors under subpart 4 is reasonable. Because the Yuba City-Marysville area has already attained the 2006 24-hour PM<sub>2.5</sub> NAAQS with its current approach to regulation of PM<sub>2.5</sub> precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that there is no need to revisit the attainment control strategy with respect to the treatment of precursors. Even if the Court's decision is construed to impose an obligation, in evaluating these redesignation requests, to consider additional precursors under subpart 4, it would not affect EPA's approval here of California's requests for redesignation of the Yuba City-Marysville nonattainment area. In the context of a redesignation, the area has shown that it has attained the standard. Moreover, the state has shown and EPA has proposed to determine that attainment in this area is due to permanent and enforceable emissions reductions on all precursors necessary to provide for continued attainment. It follows logically that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013, decision of the Court as precluding redesignation of the Yuba City-Marysville nonattainment area to attainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS at this time.

In sum, even if California were required to address precursors for the Yuba City-Marysville nonattainment area under subpart 4 rather than under subpart 1, as interpreted in EPA's remanded PM<sub>2.5</sub> Implementation Rule, EPA would still conclude that the area had met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v).

## IV. Procedural Requirements for Adoption and Submittal of SIP Revisions

30006 (May 26, 2004) (approving a  $PM_{10}$  attainment plan that impose controls on direct  $PM_{10}$  and  $NO_X$  emissions and did not impose controls on  $SO_X$ , VOC, or ammonia emissions).

<sup>&</sup>lt;sup>19</sup> See, e.g., Assoc. of Irritated Residents v. EPA et al., 423 F.3d 989 (9th Cir. 2005).

Sections 110(a)(1) and 110(l) of the Act require states to provide reasonable notice and public hearing prior to adoption of SIP revisions. In this action, we are proposing action on CARB's May 23, 2013 submittal of the Yuba City-Marysville PM<sub>2.5</sub> Plan, dated April 1, 2013, as a revision to the California SIP. The submittal documents the public review process followed by FRAQMD and CARB in adopting the Yuba City-Marysville PM<sub>2.5</sub> Plan prior to submittal to EPA as a revision to the California SIP. The documentation provides evidence that reasonable notice of a public hearing was provided to the public and that a public hearing was conducted prior to adoption.

CARB's submittal includes a letter dated April 2, 2013 from David Valler, Air Pollution

Control Officer to the Board of Directors for the FRAQMD. In addition, Enclosure 1,

Attachment 3 of CARB's submittal includes a copy of the notice to the public published on

March 2, 2013, announcing a public hearing to be held on April 1, 2013. These materials

document the public review process followed by FRAQMD in adopting the Yuba City
Marysville PM<sub>2.5</sub> Plan prior to transmittal to CARB and provide evidence that reasonable notice

of a public hearing was provided to the public and that a public hearing was conducted prior to
adoption. Specifically, the notice for the Board hearing was published in the Appeal-Democrat, a
newspaper of general circulation, on March 2, 2013. The Yuba City-Marysville PM<sub>2.5</sub> Plan was
also made available for viewing on the District's website and at the District office on March 2,
2013.

Resolution 2013-01 in CARB's submittal documents the adoption of the Yuba City-Marysville PM<sub>2.5</sub> Plan by the FRAQMD Board of Directors. On April 1, 2013, the FRAQMD Board of Directors approved the Yuba City-Marysville PM<sub>2.5</sub> Plan and directed FRAQMD staff to forward the Plan to CARB, the Governor of California's designee for SIP matters.

CARB's submittal includes CARB Board Resolution 14-13, which was adopted on April 25, 2013 and directed the Executive Officer to forward the Yuba City-Marysville PM<sub>2.5</sub> Plan to EPA for inclusion in the SIP. On May 23, 2013, CARB submitted the Yuba City-Marysville PM<sub>2.5</sub> Plan to EPA. On February 20, 2014, CARB submitted to EPA a technical supplement to the Yuba City-Marysville PM<sub>2.5</sub> Plan.<sup>20</sup>

Based on the documentation included in CARB's submittal, we find that the submittal of the Yuba City-Marysville PM<sub>2.5</sub> Plan as a SIP revision satisfies the procedural requirements of sections 110(1) of the Act for revising SIPs.

CAA section 110(k)(1)(B) requires EPA to determine whether a SIP submittal is complete within 60 days of receipt. This section also provides that any plan that we have not affirmatively determined to be complete or incomplete will become complete six months after the day of submittal by operation of law. A completeness review allows us to determine if the submittal includes all the necessary items and information we need to act on it.

We make completeness determinations using criteria we have established in 40 CFR part 51, Appendix V. These criteria fall into two categories: administrative information and technical support information. The administrative information provides documentation that the State has followed basic administrative procedures during the SIP-adoption process and thus we have a legally-adopted SIP revision in front of us. The technical support information provides us the information we need to determine the impact of the proposed revision on attainment and maintenance of the air quality standards.

We notify a state of our completeness determination by letter unless the submittal becomes complete by operation of law. A finding of completeness does not approve the submittal as part of the SIP nor does it indicate that the submittal is approvable. It does start a 12-month clock for

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<sup>&</sup>lt;sup>20</sup> Ihid.

EPA to act on the SIP submittal. See CAA section 110(k)(2). The Yuba City-Marysville PM<sub>2.5</sub> Plan became complete by operation of law on November 7, 2013.

#### V. Substantive Requirements for Redesignation

The CAA establishes the requirements for redesignation of a nonattainment area to attainment. Specifically, section 107(d)(3)(E) allows for redesignation provided that the following criteria are met: (1) EPA determines that the area has attained the applicable NAAQS; (2) EPA has fully approved the applicable implementation plan for the area under section 110(k); (3) EPA determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP, applicable federal air pollution control regulations, and other permanent and enforceable reductions; (4) EPA has fully approved a maintenance plan for the area as meeting the requirements of CAA section 175A; and (5) the State containing such area has met all requirements applicable to the area under section 110 and part D of the CAA.

EPA provided guidance on redesignations in the General Preamble, the Calcagni memorandum, the Nichols memorandum, and a document entitled "State Implementation Plans for Serious PM<sub>10</sub> Nonattainment Areas, and Attainment Date Waivers for PM<sub>10</sub> Nonattainment Areas Generally; Addendum to the General Preamble for the Implementation of title I of the Clean Air Act Amendments of 1990," 59 FR 41998 (August 16, 1994) (PM<sub>10</sub> Addendum).

In this proposed rulemaking action, EPA applies these policies to the Yuba City-Marysville PM<sub>2.5</sub> Plan, taking into consideration the specific factual issues presented. For the reasons set forth below in section VI of this document, we propose to approve CARB's request for redesignation of the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area to attainment for the 2006

24-hour PM<sub>2.5</sub> NAAQS based on our conclusion that all of the criteria under CAA section 107(d)(3)(E) have been satisfied.

# VI. Evaluation of the State's Redesignation Request for the Yuba City-Marysville PM<sub>2.5</sub> Nonattainment Area

### A. Determination That the Area Has Attained the PM<sub>2.5</sub> NAAQS

CAA section 107(d)(3)(E)(i) states that for an area to be redesignated to attainment, EPA must determine that the area has attained the relevant NAAQS. In this case, the relevant NAAQS is the 2006 24-hour PM<sub>2.5</sub> NAAQS.

Generally, EPA determines whether an area's air quality is meeting the 24-hour PM<sub>2.5</sub>

NAAQS based upon complete, <sup>21</sup> quality-assured, and certified data gathered at established state and local air monitoring stations (SLAMS) in the nonattainment area and entered into the EPA

Air Quality System (AQS) database. Data from air monitors operated by state, local, or tribal agencies in compliance with EPA monitoring requirements must be submitted to AQS. These monitoring agencies certify annually that these data are accurate to the best of their knowledge.

Accordingly, EPA relies primarily on data in AQS when determining the attainment status of areas. See 40 CFR 50.13; 40 CFR part 50, appendix L; 40 CFR part 53; 40 CFR part 58, and 40 CFR part 58, appendices A, C, D, and E. EPA will also consider air quality data from other air monitoring stations in the nonattainment area provided those stations meet the federal monitoring requirements for SLAMS, including the quality assurance and quality control criteria in 40 CFR part 58, appendix A. See 40 CFR 58.14 (2006) and 58.20 (2007);<sup>22</sup> 71 FR 61236, 61242;

<sup>&</sup>lt;sup>21</sup> For PM<sub>2.5</sub>, a year meets data completeness requirements when quarterly data capture rates for all four quarters are at least 75 percent. Three years of valid annual PM<sub>2.5</sub> 98th percentile mass concentrations are required to produce a valid 24-hour PM<sub>2.5</sub> NAAQS design value. See 40 CFR part 50, Appendix N, section 4.2.

<sup>&</sup>lt;sup>22</sup> EPA promulgated amendments to the ambient air monitoring regulations in 40 CFR parts 53 and 58 on October 17, 2006. (See 71 FR 61236.) The requirements for Special Purpose Monitors were revised and moved from 40 CFR 58.14 to 40 CFR 58.20.

(October 17, 2006). All valid data are reviewed to determine the area's air quality status in accordance with 40 CFR part 50, appendix N.

Under EPA regulations in 40 CFR part 50, section 50.13 and in accordance with appendix N, the 2006 24-hour  $PM_{2.5}$  standard is met when the design value is less than or equal to 35  $\mu$ g/m<sup>3</sup> (based on the rounding convention in 40 CFR part 50, appendix N) at each monitoring site within the area.<sup>23</sup> The  $PM_{2.5}$  24-hour average is considered valid if at least 75 percent of the hourly averages (i.e. 18 hourly values) for the 24-hour period are available.

Generally, three consecutive years of complete air quality data are required to show attainment of the 2006 24-hour PM<sub>2.5</sub> standard. See 40 CFR part 50, appendix N, section 4.2.

As described earlier, on January 10, 2013, at 78 FR 2211, EPA issued a final determination that the Yuba City-Marysville nonattainment area attained the 2006 24-hour PM<sub>2.5</sub> standard, based on complete, quality-assured, and certified ambient air monitoring data for the 2009–2011 monitoring period.

- 1. What is EPA's analysis of the relevant air quality data?
- a. Monitoring Network and Data Considerations

The CARB and local Air Pollution Control Districts and Air Quality Management Districts ("Districts") operate ambient monitoring stations throughout the State. CARB is the lead monitoring agency in the Primary Quality Assurance Organization (PQAO) that includes all the monitoring agencies in the State with a few exceptions. <sup>24,25</sup> CARB is responsible for monitoring

<sup>24</sup> A primary quality assurance organization is defined as a monitoring organization or a coordinated aggregation of such organizations that is responsible for a set of stations that monitors the same pollutant and for which data quality assessments can logically be pooled (40 CFR 58, Appendix A, section 3.1).

<sup>&</sup>lt;sup>23</sup> The PM<sub>2.5</sub> 24-hour standard design value is the 3-year average of annual 98th percentile 24-hour average PM<sub>2.5</sub> mass concentration values recorded at each eligible monitoring site [see 40 CFR part 50, appendix N, section 1.0(c)(2)].

<sup>&</sup>lt;sup>25</sup> The Bay Area Air Quality Management District, the South Coast Air Quality Management District, and the San Diego Air Pollution Control District are each designated as the PQAO for their respective ambient air monitoring programs.

ambient air quality within the Yuba City-Marysville nonattainment area. In addition, CARB oversees the quality assurance of all data collected within the CARB PQAO. CARB submits annual monitoring network plans to EPA that describe the monitoring sites CARB operates. These plans discuss the status of the air monitoring network, as required under 40 CFR part 58.10.

Since 2007, EPA has regularly reviewed these annual plans for compliance with the applicable reporting requirements in 40 CFR part 58. With respect to PM<sub>2.5</sub>, EPA has found that CARB's network plans meet the applicable requirements under 40 CFR part 58. See EPA letters to CARB approving its annual network plans for years 2011 through 2013. <sup>26</sup> EPA also concluded from its Technical System Audit of the CARB PQAO (conducted during the summer of 2011) that the ambient air monitoring network operated by CARB currently meets or exceeds the requirements for the minimum number of SLAMS for PM<sub>2.5</sub> in the Yuba City-Marysville nonattainment area. <sup>27</sup> Also, CARB annually certifies that the data it submits to AQS are complete and quality-assured. <sup>28</sup>

The existing PM<sub>2.5</sub> monitoring network in the Yuba City-Marysville nonattainment area includes a PM<sub>2.5</sub> Federal Reference Method (FRM) monitor operating on a daily schedule and a

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<sup>&</sup>lt;sup>26</sup> Letter from Matthew Lakin, Manager, Air Quality Analysis Office, U.S. EPA Region IX, to Karen Magliano, Chief, Air Quality Data Branch, Planning and Technical Support Division, CARB (November 1, 2011) (approving CARB's "2011 Annual Monitoring Network Plan for the Small Districts in California"). Letter from Meredith Kurpius, Manager, Air Quality Analysis Office, U.S. EPA Region IX, to Karen Magliano, Chief, Air Quality Data Branch, Planning and Technical Support Division, CARB (September 13, 2013) (approving CARB's "2012 Annual Monitoring Network Plan for the Small Districts in California"). Letter from Meredith Kurpius, Manager, Air Quality Analysis Office, U.S. EPA Region IX, to Karen Magliano, Chief, Air Quality Data Branch, Planning and Technical Support Division, CARB (March 7, 2014) (approving CARB's "Annual Monitoring Network Report for Twenty-Three Districts in California").

<sup>&</sup>lt;sup>27</sup> See letter from Deborah Jordan, Director, Air Division, U.S. EPA Region IX, to James Goldstene, Executive Officer, CARB, transmitting "System Audit of the Ambient Monitoring Program: California Resources Board, June-September: 2011," with enclosure, October 22, 2012.

September: 2011," with enclosure, October 22, 2012.

See, e.g., letter from Ravi Ramalingham, Chief, Consumer Products and Air Quality Assessment Branch, Planning and Technical Support Division, CARB, to Meredith Kurpius, Manager, Air Quality Analysis Office, Air Division, U.S. EPA Region IX, certifying calendar year 2013 ambient air quality data and quality assurance data, July 2, 2014.

non-Federal Equivalent Method Beta Attenuation Monitor (BAM) running in parallel to the FRM. The two instruments complement each other in the monitoring network as the FRM monitor provides accurate and precise data for purposes of area designation, while the BAM provides real-time data used by the District and CARB for Air Quality Index reporting, forecasting, and the allocation of agricultural burning. For purposes of today's action, EPA is relying on data from the FRM monitor. There was one PM<sub>2.5</sub> FRM SLAMS monitor operating during the 2009-2013 period in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area. The site is operated by CARB and has been monitoring PM<sub>2.5</sub> concentrations since 1998. EPA defines specific monitoring site types and spatial scales of representativeness to characterize the nature and location of required monitors. With respect to the Yuba City-Marysville site, the spatial scale is neighborhood scale, <sup>29,30</sup> and the monitoring objective (site type) is population exposure. <sup>31</sup>

Consistent with the requirements contained in 40 CFR part 50, we have reviewed the qualityassured, and certified PM<sub>2.5</sub> ambient air monitoring data as recorded in AQS for the applicable monitoring period collected at the monitoring site in the Yuba City-Marysville nonattainment area and have found the data to be complete.

#### b. Evaluation of Continued Attainment

EPA's evaluation of whether the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area has continued to attain the 2006 24-hour PM<sub>2.5</sub> NAAQS is based on our review of the monitoring data and takes into account the adequacy<sup>32</sup> of the PM<sub>2.5</sub> monitoring network in the nonattainment

<sup>&</sup>lt;sup>29</sup> In this context, "neighborhood" spatial scale defines concentrations within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers range. See 40 CFR part 58, appendix D.

<sup>&</sup>lt;sup>30</sup> See CARB's 2013 Annual Monitoring Network Report for Twenty-three Districts in California (July, 2013); EPA Air Quality System, Monitor Description Report, September 14, 2012.

<sup>&</sup>lt;sup>31</sup> EPA Air Quality System, Monitor Description Report, September 14, 2012.

<sup>&</sup>lt;sup>32</sup> Meets the requirements of 40 CFR part 58.

area and the reliability of the data collected by the network as discussed in the previous section of this document.

Table 1 shows the PM<sub>2.5</sub> design values for the Yuba City-Marysville nonattainment area monitor based on ambient air quality monitoring data for the most recent complete five-year period (2009-2013).<sup>33</sup> The data show that the design values for the 2009-2011, 2010-2012, and 2011-2013 periods were equal to or less than 35 μg/m<sup>3</sup> at the monitor. Therefore, we are proposing to determine, based on the complete, quality-assured data for 2011-2013, that the Yuba City-Marysville area continues to attain the 2006 24-hour PM<sub>2.5</sub> standard. Preliminary data available in AQS for 2014 indicate that the area continues to attain the standard.<sup>34</sup>

Table 1. 2009-2013 24-Hour PM <sub>2.5</sub> Monitoring Site and Design Value for the Yuba City-Marysville Nonattainment Area.									
Monitoring Site	AQS Site Identification Number	98 <sup>th</sup> Percentile (µg/m³)					Design Value (µg/m³)		
		2009	2010	2011	2012	2013	2009	2010	2011
							2011	2012	2013
Yuba City - Marysville	06-101-0003	28	17	37	24	25	27	26	29

B. The Area Must Have a Fully Approved SIP Meeting Requirements Applicable for Purposes of Redesignation under Clean Air Act Section 110 and Part D

Section 107(d)(3)(E)(ii) and (v) require EPA to determine that the area has a fully approved applicable SIP under section 110(k) that meets all applicable requirements under section 110 and part D for the purposes of redesignation.

1. Basic SIP Requirements under section 110

 $<sup>^{33}</sup>$  Quicklook Report and Design Value Report, EPA, July 25, 2014.  $^{34}$  Ibid.

The general SIP elements and requirements set forth in section 110(a)(2) include, but are not limited to, the following: submittal of a SIP that has been adopted by the State after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provision for the implementation of part C requirements for PSD provisions; provisions for the implementation of part D requirements for nonattainment new source review (nonattainment NSR) permit programs; provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

We note that SIPs must be fully approved only with respect to applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). The section 110(a)(2) (and part D) requirements that are linked to a particular nonattainment area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request.

Requirements that apply regardless of the designation of any particular area on the State are not applicable requirements for the purposes of redesignation, and the State will remain subject to these requirements after the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area is redesignated to attainment.

For example, CAA section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state, known as "transport SIPs." Because the section 110(a)(2)(D) requirements for transport SIPs are not linked to a particular nonattainment area's designation and classification but rather apply regardless of the area's attainment status, these are not applicable requirements for the purposes of redesignation under section 107(d)(3)(E).

Similarly, EPA believes that other section 110(a)(2) (and part D) requirements that are not linked to nonattainment plan submissions or to an area's attainment status are not applicable requirements for purposes of redesignation. EPA believes that the section 110 (and part D) requirements that relate to a particular nonattainment area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This view is consistent with EPA's existing policy on applicability of the conformity SIP requirement for redesignations. *See* discussion in 75 FR 36023, 36026 (June 24, 2010).

On numerous occasions, CARB and FRAQMD have submitted and we have approved provisions addressing the basic CAA section 110 provisions. The Yuba City-Marysville portion of the California SIP<sup>35</sup> contains enforceable emission limitations; requires monitoring, compiling and analyzing of ambient air quality data; requires preconstruction review of new or modified stationary sources; provides for adequate funding, staff, and associated resources necessary to implement its requirements; and provides the necessary assurances that the State maintains responsibility for ensuring that the CAA requirements are satisfied in the event that Yuba City-Marysville is unable to meet its CAA obligations. There are no outstanding or disapproved applicable SIP submittals with respect to the Yuba City-Marysville portion of the SIP that prevent redesignation of the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area for the 24-hour PM<sub>2.5</sub> standard. Therefore, we propose to conclude that CARB and FRAQMD have met all SIP requirements for Yuba City-Marysville applicable for purposes of redesignation under section 110 of the CAA (General SIP Requirements).

### 2. SIP Requirements Under Part D

Subparts 1 and 4 of part D, title 1 of the CAA contain air quality planning requirements for PM<sub>2.5</sub> nonattainment areas. Subpart 1 contains general requirements for all nonattainment areas

<sup>&</sup>lt;sup>35</sup> See http://yosemite.epa.gov/r9/r9sips.nsf/Casips?readform&count=100&state=California.

of any pollutant, including PM<sub>2.5</sub>, governed by a NAAQS. The subpart 1 requirements include, among other things, provisions for the RACM, RFP, emissions inventories, contingency measures, and conformity. Although we describe in detail in section III of this action the effect of the January 4, 2013, D.C. Circuit decision on subpart 4 of part D requirements, the subpart 4 requirements are briefly discussed below. Subpart 4 contains specific planning and scheduling requirements for PM<sub>2.5</sub> nonattainment areas. Section 189(a), (c), and (e) requirements apply specifically to moderate PM<sub>2.5</sub> nonattainment areas and include: (1) an approved permit program for construction of new and modified major stationary sources; (2) provisions for RACM; (3) an attainment demonstration; (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date; and (5) provisions to ensure that the control requirements applicable to major stationary sources of PM<sub>2.5</sub> also apply to major stationary sources of PM<sub>2.5</sub> precursors except where the Administrator has determined that such sources do not contribute significantly to PM<sub>2.5</sub> levels that exceed the NAAQS in the area.

As noted previously, in 2013, EPA determined that the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area attained the 24-hour PM<sub>2.5</sub> NAAQS based on 2009-2011 data. See 78 FR 2211 (January 10, 2013). In accordance with EPA's Clean Data Policy, we determined that the following requirements do not apply to the State for so long as Yuba City-Marysville continues to attain the PM<sub>2.5</sub> standard or until the area is redesignated to attainment: an attainment demonstration under section 189(a)(1)(B); RACM provisions under sections 172(c) and 189(a)(1)(C); reasonable further progress provisions under section 189(c)(1); and contingency measures under section 172(c)(9). For other rulemaking actions applying the Clean Data Policy in the context of PM<sub>2.5</sub>, see 77 FR 31271-72 (proposed Determination of Attainment for Paul Spur / Douglas, Arizona); 76 FR 10821-22 (proposed Determination of Attainment for Truckee

Meadows, Nevada); 75 FR 13712-14 (proposed Determination of Attainment for Coso Junction, California); 75 FR 36027 (proposed Redesignation for Coso Junction, California); 73 FR 22313 (proposed Redesignation for San Joaquin Valley). *See also*, 40 CFR 51.918.

Moreover, in the context of evaluating the area's eligibility for redesignation, there is a separate and additional justification for finding that requirements associated with attainment are not applicable for purposes of redesignation. Prior to and independently of the Clean Data Policy, and specifically in the context of redesignations, EPA interpreted attainment-linked requirements as not applicable for purposes of redesignation. In the General Preamble, "General Preamble for the Interpretation of Title I of the Clean Air Act Amendments of 1990," (General Preamble) 57 FR 13498, 13564 (April 16, 1992), EPA stated: [t]he section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date. These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas. *See also* Calcagni memorandum at 6 ("The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard.").

Thus, even if the requirements associated with attainment had not previously been suspended, they would not apply for purposes of evaluating whether an area that has attained the standard qualifies for redesignation. EPA has enunciated this position since the General Preamble was published more than twenty years ago, and it represents the Agency's interpretation of what constitutes applicable requirements under section 107(d)(3)(E). The Courts

have recognized the scope of EPA's authority to interpret "applicable requirements" in the redesignation context. *See Sierra Club v. EPA*, 375 F.3d 537 (7th Cir.2004).

The remaining applicable Part D requirements for moderate PM<sub>2.5</sub> areas are: (1) an emission inventory under section 172(c) (3); (2) a permit program for the construction and operation of new and modified major stationary sources of PM<sub>2.5</sub> under sections 172(c)(5) and 189(a)(1)(A); (3) control requirements for major stationary sources of PM<sub>2.5</sub> precursors under section 189(e), except where the Administrator determines that such sources do not contribute significantly to PM<sub>2.5</sub> levels that exceed the standard in the area; (4) requirements under section 172(c)(7) that meet the applicable provisions of section 110(a)(2); and (5) provisions to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP under section 176(c). The Yuba City-Marysville redesignation request, although not expressed in terms of subpart 4 (section 189) requirements, substantively meets the requirement for that subpart for redesignation purposes. We discuss each of these requirements below.

## • Emissions Inventory

CAA section 172(c)(3) requires states to submit a comprehensive, accurate, current inventory of relevant PM<sub>2.5</sub> pollutants for the baseline year from all sources within the nonattainment area. The inventory is to address direct and secondary PM<sub>2.5</sub> emissions, and all stationary (generally referring to larger stationary source or "point" sources), area (generally referring to smaller stationary and fugitive sources), and mobile (on-road, non-road, locomotive and aircraft) sources are to be included in the inventory. We interpret the Act such that the emission inventory requirements of section 172(c)(3) are satisfied by the inventory requirements of the maintenance plan. See 57 FR 13498, at 13564 (April 16, 1992). Thus, EPA is proposing to approve the 2011 attainment year inventories submitted as part of the Yuba City-Marysville PM<sub>2.5</sub> Plan as

satisfying the requirements of sections 172(c)(3) for the purposes of redesignation of the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area to attainment for the 24-hour PM<sub>2.5</sub> NAAQS. The 2011 attainment year inventories are described in VI.D.1 of this notice.

• Permits for New and Modified Major Stationary Sources

CAA sections 172(c)(5) and 189(a)(1)(A) require the State to submit SIP revisions that establish certain requirements for new or modified stationary sources in nonattainment areas, including provisions to ensure that new major sources or major modifications of existing sources of nonattainment pollutants incorporate the highest level of control, referred to as the Lowest Achievable Emission Rate (LAER), and that increases in emissions from such stationary sources are offset so as to provide for reasonable further progress towards attainment in the nonattainment area.

The process for reviewing permit applications and issuing permits for new or modified major stationary sources of air pollution is referred to as NSR. With respect to nonattainment pollutants in nonattainment areas, this process is often referred to as "nonattainment NSR." With respect to pollutants for which an area is designated as attainment or unclassifiable, states are required to submit SIP revisions that ensure that major new stationary sources or major modifications of existing stationary sources meet the federal requirements for PSD, including application of "Best Available Control Technology" (BACT), for each applicable pollutant emitted in significant amounts, among other requirements.

FRAQMD is responsible for stationary source emissions units, and FRAQMD regulations govern air permits issued for such units. EPA has partially approved and partially disapproved FRAQMD's New Source Review rule (i.e., Rule 10.1). 78 FR 58461 (September 24, 2013). Because of the partial disapproval, FRAQMD does not currently have a fully-approved

nonattainment NSR program. The NSR deficiencies identified in EPA's partial approval and partial disapproval of Rule 10.1 are limited to the following issues: (1) missing a component of the definition for the term "Regulated NSR Pollutant," as it relates to PM<sub>2.5</sub> condensable emissions; and (2) Rule 10.1 contains certain language in new sections B.4 and B.5 that entirely exempts from regulation certain pollutants when EPA redesignates the area from nonattainment to attainment. As worded, the provision is too broad, in that it exempts such pollutants from all the requirements of section E of the rule, rather than just those provisions applicable to major sources of nonattainment pollutants. FRAQMD is currently working on a revision to Rule 10.1 to correct the deficiencies. If EPA approves a revised Rule 10.1, and the approval becomes effective prior to EPA finalizing the area's redesignation to attainment for PM<sub>2.5</sub>, the 172(c)(5) and 189(a(1)(A) requirements would be fulfilled prior to redesignation.

If EPA does not approve a revised Rule 10.1 prior to EPA finalizing the area's redesignation to attainment for PM<sub>2.5</sub>, it would still not affect EPA approval of the redesignation request because upon redesignation the nonattainment permitting program requirements would shift to the PSD permitting program requirements. Even if EPA later finalizes the actions in today's proposed rulemaking, the federal PSD requirements under 40 CFR 52.21 will not apply to new major sources or major modifications to existing major sources of NO<sub>x</sub> and VOC located in the southern portion of Sutter County under FRAQMD's jurisdiction within the Sacramento Metro ozone nonattainment area until that area is redesignated to attainment for the 2008 8-hour ozone standard. Because FRAQMD does not currently have an EPA-approved PSD program, after redesignation the federal PSD requirements under 40 CFR 52.21 would apply to PM<sub>2.5</sub> and PM<sub>2.5</sub> precursor emissions from new major sources or major modifications. Thus, new major sources with significant PM<sub>2.5</sub> emissions and major modifications of PM<sub>2.5</sub> at major sources as defined

under 40 CFR 51.21 will be required to obtain a PSD permit or include PM<sub>2.5</sub> emissions in their existing PSD permit. Since PSD requirements<sup>36</sup> will apply after redesignation, an area being redesignated to attainment need not comply with the requirement that a nonattainment NSR program be approved prior to redesignation as long as the state demonstrates maintenance of the NAAQS in the area without implementation of nonattainment NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, titled "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." *See also,* redesignation rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and, Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

Based on our review of the Yuba City-Marysville PM<sub>2.5</sub> Plan, we conclude that the maintenance demonstration does not rely on implementation of nonattainment NSR because the Plan applies standard growth factors to stationary source emissions and does not rely on NSR offsets to reduce the rate of increase in emissions over time from point sources.<sup>37</sup> In addition, the PM<sub>2.5</sub> Plan adds emission reduction credits (ERCs) for PM<sub>10</sub>,<sup>38</sup> NO<sub>x</sub>, and oxides of sulfur (SO<sub>x</sub>) to future projected emissions to ensure that the use of ERCs will not be inconsistent with the future PM<sub>2.5</sub> maintenance goals. Therefore, EPA concludes that a fully-approved nonattainment NSR program is not necessary for approval of the State's redesignation request for the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area.

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<sup>&</sup>lt;sup>36</sup> PSD requirements control the growth of new source emissions in areas designated as attainment for a NAAQS.

<sup>&</sup>lt;sup>37</sup> Email from Sondra Spaethe, FRAQMD, to John Ungvarsky, US EPA, Region 9, July 18, 2014.

<sup>&</sup>lt;sup>38</sup> The FRAQMD issues ERCs for PM<sub>10</sub> and has not identified the PM<sub>2.5</sub> portion of the ERC. When creating the future year inventories for the maintenance demonstration, the FRAQMD applied the amount of PM10 ERCs to the future year inventories of PM<sub>2.5</sub>. As PM<sub>2.5</sub> is a portion of PM10, this approach conservatively estimates the maximum pollutant increase if all ERCs were redeemed within the FRAQMD during the maintenance period.

We conclude that Yuba City-Marysville's portion of the California SIP adequately meets the requirements of section 172(c)(5) and 189(a)(1)(A) for purposes of this redesignation.

• Control Requirements for PM<sub>2.5</sub> Precursors

In light of the January 4, 2013, D.C. Circuit decision regarding PM<sub>2.5</sub> implementation under subpart 4 of Part D of Title I of the CAA, EPA's evaluation of the Yuba City-Marysville PM<sub>2.5</sub> Plan in the context of the CAA section 189(e) requirements for control of PM<sub>2.5</sub> precursors is described in depth in sections III and VI.D.3 of this action.

• *Compliance with section 110(a)(2)* 

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, we conclude the California SIP meets the requirements of section 110(a)(2) applicable for purposes of this redesignation.

• General and Transportation Conformity Requirements

Under section 176(c) of the Clean Air Act Amendments of 1990, states are required to establish criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. Section 176(c) further provides that state conformity provisions must be consistent with federal conformity regulations that the CAA requires EPA to promulgate. EPA's conformity regulations are codified at 40 CFR part 93, subparts A (referred to herein as "transportation conformity") and B (referred to herein as "general conformity"). Transportation conformity applies to transportation plans, programs, and projects developed, funded, and approved under title 23 U.S.C. or the Federal Transit Act, and general conformity applies to all other federally-supported or funded projects. SIP revisions intended to address the conformity requirements are referred to herein as "conformity SIPs."

EPA believes it is reasonable to interpret the conformity SIP requirements as not applying for purposes of a redesignation request under section 107(d) because state conformity rules are still required after redesignation and federal conformity rules apply where state rules have not been approved. See *Wall* v. *EPA*, 265 F. 3d 426 (6th Cir. 2001), upholding this interpretation. See also, 60 FR 62748 (December 7, 1995).

The Yuba City-Marysville PM<sub>2.5</sub> Plan includes PM<sub>2.5</sub> motor vehicle emissions budgets (MVEBs) for the Yuba City-Marysville nonattainment area. As described in VI.D.6 of today's action, EPA is proposing to approve the emissions inventory and motor vehicle emissions budgets for Yuba City-Marysville PM<sub>2.5</sub> nonattainment area. Thus, if EPA later finalizes its approval of the Yuba City-Marysville PM<sub>2.5</sub> Plan described in today's proposal and also finalizes its approval of the emissions inventory and motor vehicle emissions budgets for the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area, the State has a fully-approved SIP meeting all requirements applicable under section 110 and part D for purposes of redesignation. CAA section 107(d)(3)(E)(v).

C. EPA Has Determined That the Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions.

Section 107(d)(3)(E)(iii) requires EPA to determine that the improvement in air quality is due to emission reductions that are permanent and enforceable resulting from the implementation of the applicable SIP and applicable federal air pollution control regulations and other permanent and enforceable regulations in order to approve a redesignation to attainment. Under this criterion, a state must be able to reasonably attribute the improvement in air quality to emissions reductions which are permanent and enforceable. Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse

economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions. Calcagni memorandum, p. 4.

Historically, exceedances of the 24-hour PM<sub>2.5</sub> NAAQS in the Yuba City-Marysville nonattainment area occur in November through February. Chemical composition data can be used to understand the types of emission sources that contribute to ambient PM<sub>2.5</sub> in these winter months, however, these measurements are not routinely collected in the Yuba City-Marysville nonattainment area. A limited chemical composition analysis was done on samples collected at the Yuba City-Almond Street monitor (AQS ID: 061010003) in 2004-2006.<sup>39</sup> Archived Teflon filters were analyzed by a combination of X-ray Fluorescence (XRF) to provide elemental concentrations and Ion Chromatography (IC) to estimate ions (sulfate, nitrate, potassium, ammonium, etc.). These data show that PM<sub>2.5</sub> on days with high concentrations during the cool season<sup>40</sup> was made up predominantly of total carbonaceous mass (TCM) (54%) and ammonium nitrate (38%). The high TCM is linked to smoke from residential wood burning stoves and fireplaces, Sulfate (6%) and crustal materials (2%) account for a smaller portion of the PM<sub>2.5</sub>. See Plan, pp. IV–5 – IV-7.

The Yuba City-Marysville PM<sub>2.5</sub> Plan credits control measures adopted and implemented by FRAQMD and CARB and approved into the SIP by EPA as reducing emissions to attain the 2006 24-hour PM<sub>2.5</sub> NAAQS. The FRAQMD has jurisdiction over air quality planning requirements for the Yuba City-Marysville nonattainment area and is largely responsible for the regulation of stationary sources and most area sources. Table 2 lists FRAQMD rules adopted

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<sup>&</sup>lt;sup>39</sup> Availability of New Speciation Data for Some Areas that EPA Intends to Designate as Nonattainment, Neil Frank, Office of Air Quality Planning and Standards, September 18, 2008 available at <a href="http://www.epa.gov/ttn/naaqs/pm/docs/available\_new\_speciation\_data\_pm2.5\_naa.pdf">http://www.epa.gov/ttn/naaqs/pm/docs/available\_new\_speciation\_data\_pm2.5\_naa.pdf</a>.

<sup>&</sup>lt;sup>40</sup> Days > 95<sup>th</sup> percentile of measured PM<sub>2.5</sub> during October - April

since the area's PM<sub>2.5</sub> nonattainment designation that contribute towards attainment and maintenance of the 2006 24-hour PM<sub>2.5</sub> NAAQS.

Table	Table 2. FRAQMD Control Measures and Programs Contributing Towards							
Attain	Attainment and Maintenance of the 2006 24-hour PM <sub>2.5</sub> NAAQS.							
Rule	Title	Adoption Date	Status					
2.0	Open Burning	October 6, 2008	EPA is currently preparing proposed rulemaking and direct final notices acting on this rule submittal.					
3.17	Wood Heating Devices	October 5, 2009, amended on February 3, 2014	EPA is currently preparing proposed rulemaking and direct final notices acting on this rule submittal.					
3.21	Industrial, Institutional, and Commercial Boilers, Steam Generators, And Process Heaters	June 5, 2006	Submitted to EPA on February 10, 2014					
3.22	Internal Combustion Engines	June 1, 2009	Approved, 77 FR 12493 (March 1, 2012)					
Other	Other FRAQMD measures or programs not in the SIP <sup>41,42</sup>							
	2011/2012 Wood Stove Change Out Program							
	Stoplight: Check Before You Burn Program							

Source categories for which CARB has primary responsibility for reducing emissions in California include most new and existing on- and off-road engines and vehicles, motor vehicle fuels, and consumer products. In addition, California has unique authority under CAA section 209 (subject to a waiver by EPA) to adopt and implement new emission standards for many categories of on-road vehicles and engines, and new and in-use off-road vehicles and engines.

<sup>&</sup>lt;sup>41</sup> FRAQMD estimated the Wood Stove Change Out Program offered in 2009, 2010, and 2011 reduced PM<sub>2.5</sub> emissions by 2.8 tons per year. Memorandum from David Valler, Air Pollution Control Officer, FRAQMD to the FRAQMD Board of Directors, April 1, 2013.

<sup>&</sup>lt;sup>42</sup> The Yuba City-Marysville nonattainment area is included in the State's Sacramento Valley Air Basin Smoke Management Program. The program describes the policies and procedures used with hourly and daily measurements of air quality and meteorology to determine how much open biomass burning can be allowed in the Sacramento Valley Air Basin. The program ensures that agricultural burning is prohibited on days meteorologically conducive to potentially elevated PM<sub>10</sub> concentrations. The area covered by the program is referred to as the Sacramento Valley Air Basin, and includes all or parts of the following counties: Butte, Colusa, Glenn, Placer (portion), Sacramento, Shasta, Solano (portion), Sutter, Tehama, Yolo and Yuba. See Title 17 California Code of Regulations, Subchapter 2, Section 80100 et. seq. The regulations can be viewed at http://www.arb.ca.gov/smp/regs/RevFinRegwTOC.pdf.

Given the need for significant emissions reductions from mobile and area sources to meet the ozone and PM<sub>2.5</sub> NAAQS in California nonattainment areas, California has been a leader in the development of some of the most stringent control measures nationwide for on-road and off-road mobile sources and the fuels that power them. These standards have reduced new car emissions by 99 percent and new truck emissions by 90 percent from uncontrolled levels. 2007 State Strategy, p. 37.43 In addition, the State has standards for lawn and garden equipment, recreational vehicles and boats, and other off-road sources that require newly manufactured equipment to be 80-98 percent cleaner than their uncontrolled counterparts. *Id.* Finally, the State has adopted many measures that focus on achieving reductions from in-use mobile sources that include more stringent inspection and maintenance (I/M) or "Smog Check" requirements, truck and bus idling restrictions, and various incentive programs. Since 1994 alone, the State has taken more than 45 rulemaking actions and achieved most of the emissions reductions needed for attainment in the State's nonattainment areas. See 2007 State Strategy, pp. 36-40. These measures that have resulted in significant reductions in emissions of PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors (e.g., NO<sub>x</sub>) in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area and throughout the State.

CARB developed its 2007 State Strategy after an extensive public consultation process to identify potential SIP measures. From this process, CARB identified and committed to propose 15 new defined measures. These measures focus on cleaning up the in-use fleet as well as increasing the stringency of emissions standards for a number of engine categories, fuels, and consumer products. Many, if not most, of these measures have been adopted or are being

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<sup>&</sup>lt;sup>43</sup> The 2007 State Strategy was adopted by CARB on September 27, 2007 and submitted to EPA on November 16, 2007. See CARB Resolution No. 07-28, September 27, 2007 with attachments and letter, James N. Goldstene, Executive Officer, CARB, to Wayne Nastri, Regional Administrator, EPA Region 9, November 16, 2007 with enclosures.

<sup>&</sup>lt;sup>44</sup> More information on this public process, including presentations from the workshops and symposium that preceded the adoption of the 2007 State Strategy, can be found at www.arb.ca.gov/planning/sip/2007sip/2007sip.htm.

proposed for adoption for the first time anywhere in the nation. They build on CARB's already comprehensive program described above that addresses emissions from all types of mobile sources and consumer products, through both regulations and incentive programs.

In April 2009, CARB adopted the Revised 2007 State Strategy. This submittal updated the 2007 State Strategy to reflect its implementation during 2007 and 2008. These measures fall into two categories: measures that are subject to a waiver of federal preemption or authorization to adopt under CAA section 209 ("waiver or authorization measures") and those for which the State is not required to obtain a waiver or authorization ("non-waiver or non-authorization measures"). Emissions reductions from waiver or authorization measures are fully creditable in attainment and RFP demonstrations and may be used to meet other CAA requirements, such as contingency measures. The State's baseline non-waiver or non-authorization measures have generally all been approved by EPA into the SIP and as such are fully creditable for meeting CAA requirements. The Technical Support Document (TSD) includes tables of local and State measures adopted since 1990 and their current status.

Finally, in addition to the local district and State rules discussed above, the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area has also benefitted from emission reductions from federal measures. These federal measures include EPA's national emissions standards for heavy-duty diesel trucks, certain emissions standards for new construction and farm equipment (i.e., Tier 2 and 3 non-road engines standards, and Tier 4 diesel non-road engine standards), and locomotive engine standards. See 66 FR 5001 (January 18, 2001), 63 FR 56968 (October 23, 1998), 69 FR 38958 (June 29, 2004), 63 FR 18978 (April 16, 1998) and 73 FR 37096 (June 30, 2008).

The on-road and off-road vehicle and engine standards cited above have contributed to improved air quality through the gradual, continued turnover and replacement of older vehicle models with newer models manufactured to meet increasingly stringent emissions standards.

Table 3 includes CARB State Strategy measures adopted since 2007 and included in the Yuba City-Marysville Plan as measures contributing towards attainment and maintenance of the 2006 24-hour PM<sub>2.5</sub> standard in the Yuba City-Marysville nonattainment area.

Table 3. Control Measures in CARB's 2007 State Strategy Contributing						
Towards Attainment and/or Continued Attainment of the 2006 24-Hour PM <sub>2.5</sub>						
NAAQS in the Yuba City-Ma Defined State Measure	Adoption Date	Current Status				
Defined State Weasure	Adoption Date	Elements approved, 75 FR				
Smog Check Improvements	August 31, 2009	38023 (July 1, 2010)				
Expanded Vehicle Retirement	June 26, 2009	Not submitted to EPA				
Modifications to Reformulated Gasoline Program	June 14, 2007	Approved, 75 FR 26653 (May 12, 2010)				
Cleaner In-use Heavy Duty Trucks	December 16, 2010	Approved, 77 FR 20308, April 4, 2012.				
Clean Up Existing Harbor Crafts	November 15, 2007	Authorization granted, 76 FR 77521, December 13, 2011.				
Cleaner In-Use Off-Road Equipment (over 25 hp)	December 17, 2010	Authorization granted, 78 FR 58090, September 20, 2013.				
New Emissions Standards for Recreational Boats	February 2015	Not yet adopted				
Expanded Off-Road Recreational Vehicle Emissions Standards	July 25, 2013	Not yet approved by California's Office of Administrative Law				
Additional Evaporative Emission Standards (for Off- Road Sources) (e.g., Portable Outboard Marine Tanks and Components)	September 25, 2008	Similar to federal requirement at 40 CFR 1060.105				
	November 17, 2007	Approved, 74 FR 57074, November 4, 2009				
Consumer Products Program	June 26, 2008	Approved, 76 FR 27613, May 12, 2011				
	September 24, 2009	Approved, 77 FR 7535, February 13, 2012				

November 18, 2010	Proposed rulemaking and direct final notices signed on August 5, 2014 and pending publication.
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We note that many of the control measures cited above and in the Yuba City-Marysville PM<sub>2.5</sub> Plan have provided emissions reductions after 2007, and thus, the improvement in air quality may reasonably be attributed to them. In addition, as documented in the TSD, CARB adopted and implemented numerous measures during and prior to 2007 that, through fleet turnover, provided reductions in direct PM<sub>2.5</sub> and in PM<sub>2.5</sub> precursors that also contributed towards attainment.

Table 4 provides a comparison of 2005 nonattainment year and 2011 attainment year inventories to show the impact of the permanent and enforceable reductions. In 2005, area-wide NO<sub>x</sub> and PM<sub>2.5</sub> emissions in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area were estimated to be approximately 26 and 6 tons per day (tpd) (winter day), respectively. In 2011, area-wide emissions had declined to 19 tpd for NO<sub>x</sub> and 5 tpd for PM<sub>2.5</sub>, resulting in emissions reductions of 27% in NO<sub>x</sub> and 9% in PM<sub>2.5</sub>. In addition, emissions of SOx, ammonia (NH<sub>3</sub>), and VOC all declined during the 2005 to 2011 timeframe.

Table 4. Yuba City-Marysville Emissions Inventories for 2005 and 2011 and Net Changes (tpd) <sup>a</sup>							
Pollutant	Category	Ye	Year Net Ch				
NOx		2005	2011	2005-2011	%		
	Stationary Sources	4.5	4.4	-0.1	-2%		
	Areawide Sources	1.1	1.1	0.0	-2%		
	On-Road Mobile Sources	12.9	8.4	-4.5	-35%		
	Other Mobile Sources	8.0	5.4	-2.6	-32%		
	Total	26.5	19.3	-7.3	-27%		
PM <sub>2.5</sub>							
	Stationary Sources	1.0	0.9	-0.1	-11%		
	Areawide Sources	4.0	3.8	-0.2	-5%		
	On-Road Mobile Sources	0.4	0.3	-0.1	-24%		
	Other Mobile Sources	0.4	0.3	-0.1	-30%		

	Total	5.8	5.3	-0.5	-9%
$SO_X$					
	Stationary Sources	0.1	0.1	0.0	-3%
	Areawide Sources	0.2	0.1	0.0	-5%
	On-Road Mobile Sources	0.1	0.0	-0.1	-72%
	Other Mobile Sources	0.2	0.1	-0.1	-72%
	Total	0.6	0.4	-0.2	-38%
NH <sub>3</sub>					
	Stationary Sources	0.3	0.4	0.1	17%
	Areawide Sources	4.6	4.5	-0.1	-1%
	On-Road Mobile Sources	0.2	0.2	0.0	-13%
	Other Mobile Sources	0.0	0.0	0.0	0%
	Total	5.1	5.0	0.0	-1%
VOC	Stationary Sources	3.8	4.0	0.2	5%
	Areawide Sources	5.8	5.5	-0.3	-5%
	On-Road Mobile Sources	3.7	2.8	-0.9	-25%
	Other Mobile Sources	3.0	2.3	-0.6	-21%
	Total	16.3	14.6	-1.6	-10%

<sup>&</sup>lt;sup>a</sup> Source: Table 1 in CARB's 2014 Staff Report. Net percent change is computed using the original figures having four decimal places, but values in Table 5 for 2005, 2011, and net tpd change are rounded to the nearest tenth of a tpd, and, as a result, adding rounded values may not equal totals in table.

With respect to the connection between the emissions reductions and the improvement in air quality, we also conclude that the air quality improvement in the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area between 2005 and 2011 was not the result of a local economic downturn or unusual or extreme weather patterns. Despite a significant economic slowdown nationally starting in 2008, gross domestic product in the Yuba City-Marysville Metropolitan Statistical Area grew by approximately 17 percent between 2005 and 2012. We also note the downward trend in PM<sub>2.5</sub> beginning in 2000 and continuing through 2012. Meteorological conditions (e.g., average temperatures) for the 2005-2007 nonattainment period were similar to the 2009-2011

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 $<sup>^{45}</sup>$  See Table IV-1 on page IV-3 of the Yuba City-Marysville PM $_{2.5}$  Plan and Figure 2 in CARB's 2014 Staff Report.

attainment period,  $^{46}$  yet the PM<sub>2.5</sub> design value for the 2009-2011 period was 27  $\mu$ g/m<sup>3</sup>, approximately 23% below the 2006 24-hour PM<sub>2.5</sub> standard.

Thus, we find that the improvement in air quality in the Yuba City-Marysville  $PM_{2.5}$  nonattainment area is the result of permanent and enforceable emissions reductions from a combination of EPA-approved local and State control measures and federal control measures. As such, we propose to find that the criterion for redesignation set forth at CAA section 107(d)(3)(E)(iii) is satisfied.

D. The Area Must Have a Fully Approved Maintenance Plan under Clean Air Act Section 175A.

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. We interpret this section of the Act to require, in general, the following core elements: attainment inventory, maintenance demonstration plus a commitment to submit a second maintenance plan eight years after redesignation, monitoring network, verification of continued attainment, and contingency plan. See Calcagni memorandum, pages 8 through 13.

Under CAA section 175A, a maintenance plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after EPA approves a redesignation to attainment. Eight years after redesignation, the State must submit a revised maintenance plan that demonstrates continued attainment for the subsequent ten-year period following the initial ten-year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain such contingency provisions that EPA deems necessary to promptly correct any violation of the NAAQS that occurs after redesignation of the area. Based on our review and

<sup>&</sup>lt;sup>46</sup> Temperature data are collected by CARB at the Yuba City-Almond Street monitoring site, and the precipitation data are collected at the Yuba City Airport.

evaluation of the plan, as detailed below, we are proposing to approve the Yuba City-Marysville PM<sub>2.5</sub> Plan because we believe that it meets the requirements of CAA section 175A.

# 1. Attainment Inventory

Section 172(c)(3) of the CAA requires plan submittals to include a comprehensive, accurate, and current inventory of actual emissions from all sources in the nonattainment area. In demonstrating maintenance in accordance with CAA section 175A and the Calcagni memorandum, the State should provide an attainment emissions inventory to identify the level of emissions in the area sufficient to attain the NAAQS. Where the State has made an adequate demonstration that air quality has improved as a result of the SIP, the attainment inventory will generally be an inventory of actual emissions at the time the area attained the standard. EPA's primary guidance in evaluating these inventories is the document entitled, "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations," EPA, OAQPS, EPA–454/R–05–011 (August 2005).<sup>47</sup>

A maintenance plan for the 2006 24-hour PM<sub>2.5</sub> standard must include an inventory of emissions of PM<sub>2.5</sub> and its precursors (i.e., NO<sub>x</sub>, SO<sub>x</sub>, and VOC) in the area to identify a level of emissions sufficient to attain the 2006 24-hour PM<sub>2.5</sub> standard. This inventory must be consistent with EPA's most recent guidance on emissions inventories for nonattainment areas available at the time and should represent emissions during the time period associated with the monitoring data showing attainment. The inventory must also be comprehensive, including emissions from stationary point sources, area sources, and mobile sources.

FRAQMD selected year 2011 as the year for the attainment inventory in the Yuba City-Marysville PM<sub>2.5</sub> Plan. Year 2011 is a current, accurate, and comprehensive inventory during a

<sup>&</sup>lt;sup>47</sup> This document can be found at http://www.epa.gov/ttn/chief/eidocs/eiguid/eiguidfinal nov2005.pdf

period which the area continued to attain the 24-hour PM<sub>2.5</sub> standard prior to adoption and submittal of the redesignation request and maintenance plan. The attainment inventory will generally be the actual inventory during the time period the area attained the standard. EPA previously made an attainment determination for the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area. See 67 FR 7082, February 15, 2002. Thus, FRAQMD's selection of 2011 for the attainment inventory is acceptable.

Based on our review of the Yuba City-Marysville PM<sub>2.5</sub> Plan, we find that the emissions inventories in the Plan are comprehensive in that they include estimates of PM<sub>2.5</sub> and its precursors from all of the relevant source categories, which the Plan divides among stationary, area wide, on-road motor vehicles, and other mobile. The Yuba City-Marysville PM<sub>2.5</sub> Plan includes 2011 (along with 2017 and 2024) inventories of direct PM<sub>2.5</sub>, NO<sub>x</sub>, SOx, VOC, and ammonia for the Yuba City-Marysville nonattainment area.<sup>48</sup>

The stationary source category of the emissions inventory includes non-mobile, fixed sources of air pollution comprised of individual industrial, manufacturing, and commercial facilities. Examples of stationary sources (aka, point sources) include fuel combustion (e.g., electric utilities), waste disposal (e.g., landfills), cleaning and surface coatings (e.g., printing), petroleum production and marketing, and industrial processes (e.g., chemical). Stationary source operators report to the Districts the process and emissions data used to calculate emissions from point sources. FRAQMD's 2011 (and subsequent year inventories) for stationary sources were

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<sup>&</sup>lt;sup>48</sup> See Tables V-1 and VI-1 in the Yuba City-Marysville PM<sub>2.5</sub> Plan. For additional details on the 2011, 2017, and 2024 inventories, see Appendix A to the Yuba City-Marysville PM<sub>2.5</sub> Plan and 2017 and 2024 on-road mobile source inventories in attachment to email from Binu Abraham, SACOG, to John Ungvarsky, EPA Region 9, December 11, 2013.

developed using information reported to FRAQMD by emission sources and entered into the California Emission Inventory Development and Reporting System (CEIDARS) database.<sup>49</sup>

The area sources category includes aggregated emissions data from processes that are individually small and widespread or not well-defined point sources. The area source subcategories include solvent evaporation (e.g., consumer products and architectural coatings) and miscellaneous processes (e.g., residential fuel combustion and farming operations). Emissions from these sources are calculated through area source methodologies that rely on emission factors and activity data such as product sales, population, employment data, and other parameters for a wide range of activities that generate air pollution across the Sacramento nonattainment region. <sup>50</sup>

The on-road motor vehicles inventory category consists of trucks, automobiles, buses, and motorcycles. California's model for estimating emissions from on-road motor vehicles operating in California is referred to as "EMFAC" (short for EMission FACtor). EMFAC has undergone many revisions over the years, and the current on-road motor vehicles emission model is EMFAC2011, the CARB model approved by EPA for estimating on-road motor source emissions. The on-road emissions inventory estimates in the Yuba City-Marysville PM<sub>2.5</sub> Plan were prepared by CARB using EMFAC2011. The vehicle miles traveled were developed from

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<sup>&</sup>lt;sup>49</sup> The CEIDARS database consists of two categories of information: source information and utility information. Source information includes the basic inventory information generated and collected on all point and area sources. Utility information generally includes auxiliary data, which helps categorize and further define the source information. Used together, CEIDARS is capable of generating complex reports based on a multitude of category and source selection criteria.

<sup>&</sup>lt;sup>50</sup> Detailed information on the area-wide source category emissions is found on the CARB website: http://www.arb.ca.gov/ei/areasrc/areameth.htm.

<sup>&</sup>lt;sup>51</sup> See 78 FR 14533 (March 6, 2013) regarding EPA approval of the 2011 version of the California EMFAC model and announcement of its availability. The software and detailed information on the EMFAC vehicle emission model can be found on the following CARB web site: http://www.arb.ca.gov/msei/msei.htm.

Sacramento Area Council of Governments (SACOG) activity data using transportation modeling in Metropolitan Transportation/Sustainable Communities Strategy Plan for 2035. 52

With respect to off-road mobile sources (or "other mobile" as categorized in the PM<sub>2.5</sub> Plan), the category includes aircraft, trains, boats, and off-road vehicles and equipment used for construction, farming, commercial, industrial, and recreational activities. In general, off-road emissions are calculated using equipment population, engine size and load, usage activity, and emission factors. Off-road mobile source emissions were calculated using CARB category specific methods and inventory models.<sup>53</sup> For unlisted categories, CARB's OFFROAD2007 model was used to calculate emissions.

Table 5 presents the direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursor emissions estimates for 2011, 2017, and 2024 in the Yuba City-Marysville PM<sub>2.5</sub> Plan. Based on the 2011 inventory estimates in Table 4, the on-road and off-road mobile sources accounted for 44% and 28%, respectively, of the NO<sub>x</sub> emissions. Areawide sources (e.g., residential wood burning, farming operations, and managed burning) accounted for 72% of direct PM<sub>2.5</sub>.

	Table 5. Yuba City-Marysville Emissions Inventories for 2011, 2017, and 2024 and Net Changes between 2011 to 2024 (tpd) <sup>a</sup>							
Pollutant	1	Year Net Change						
NO <sub>x</sub>		2011	2017	2024	2011- 2024	%		
	Stationary Sources	4.4	4.8	4.3	-0.1	-2%		
	Areawide Sources	1.1	1.3	1.3	0.2	17%		
	On-Road Mobile Sources	8.4	5.3	3.1	-5.3	-63%		
	Other Mobile Sources	5.4	4.6	3.4	-2.1	-38%		
	Total	19.3	16.0	12.1	-7.2	-37%		
PM <sub>2.5</sub>								
	Stationary Sources	0.9	1.0	1.1	0.3	29%		
	Areawide Sources	3.8	4.1	4.0	0.1	4%		
	On-Road Mobile Sources	0.3	0.2	0.2	-0.1	-26%		

<sup>&</sup>lt;sup>52</sup> Metropolitan Transportation/Sustainable Communities Strategy Plan, SACOG, adopted April 19, 2013. For more information, go to: http://www.sacog.org/2035/mtpscs/.

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<sup>&</sup>lt;sup>53</sup> Available at http://www.arb.ca.gov/msei/categories.htm#offroad motor vehicles.

	Other Mobile Sources	0.3	0.2	0.1	-0.1	-50%
	Total	5.3	5.5	5.4	0.2	3%
$SO_x$						
	Stationary Sources	0.1	0.2	0.2	0.1	90%
	Areawide Sources	0.1	0.3	0.2	0.1	67%
	On-Road Mobile Sources	0.0	0.0	0.0	0.0	14%
	Other Mobile Sources	0.1	0.1	0.1	0.0	1%
	Total	0.4	0.6	0.6	0.2	61%
NH <sub>3</sub>						
	Stationary Sources	0.4	0.4	0.5	0.1	35%
	Areawide Sources	4.5	4.3	4.3	-0.2	-5%
	On-Road Mobile Sources	0.2	0.2	0.2	0.0	-16%
	Other Mobile Sources	0.0	0.0	0.0	0.0	0%
	Total	5.0	4.9	4.9	-0.1	-3%
VOCs	Stationary Sources	4.0	4.5	4.1	0.1	2%
	Areawide Sources	5.5	6.3	6.5	1.0	19%
	On-Road Mobile Sources	2.8	1.5	1.1	-1.7	-60%
	Other Mobile Sources	2.3	2.0	1.7	-0.6	-26%
	Total	14.6	14.2	13.4	-1.2	-8%

<sup>&</sup>lt;sup>a</sup> Source: Table 1 in CARB's 2014 Staff Report. Net percent change is computed using the original figures having four decimal places, but values for 2011, 2017, 2018, and net tpd change are rounded to the nearest tenth of a tpd and, as a result, adding rounded values may not equal totals in table.

Based on our review of the emissions inventories (and related documentation) from the Yuba City-Marysville PM<sub>2.5</sub> Plan, we find that the inventories for 2011 are comprehensive, that the methods and assumptions used by CARB and FRAQMD to develop the emission inventories are reasonable, and that the 2011 inventory reasonably estimates actual PM<sub>2.5</sub> emissions in the attainment year. Therefore, we are proposing to approve the 2011 inventory, which serves as the Yuba City-Marysville PM<sub>2.5</sub> Plan's attainment year inventory, as satisfying the requirements of section 172(c)(3) of the CAA for the purposes of redesignation of the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area to attainment of the 24-hour PM<sub>2.5</sub> NAAQS.

#### 2. Maintenance Demonstration

Section 175A(a) of the CAA requires that the maintenance plan "provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned

for at least 10 years after the redesignation." Generally, a state may demonstrate maintenance of the 24-hour PM<sub>2.5</sub> NAAQS by modeling to show that the future mix of sources and emissions rates will not cause a violation of the NAAQS. A showing that future emissions will not exceed the level of the attainment year inventory can also be used to further support of a maintenance demonstration. For areas that are required under the Act to submit modeled attainment demonstrations, the maintenance demonstration should use the same type of modeling. Calcagni memorandum, page 9.

The Yuba-City Marysville PM<sub>2.5</sub> Plan's maintenance demonstration is based on the use of proportional rollback to demonstrate maintenance of the 24-hour PM<sub>2.5</sub> standard until the maintenance year 2024. See Plan, pp. VI-1 – VI-3. FRAQMD assumes that the 2011 design value (DV) will change in proportion to the change in the corresponding species components of the emission inventory between 2011 and 2024.

As described previously, exceedances of the 24-hour PM<sub>2.5</sub> NAAQS in the Yuba City-Marysville nonattainment area have occurred November through February. Chemical composition data can be used to understand the types of emission sources that contribute to ambient PM<sub>2.5</sub> in these winter months; however, these measurements are not routinely collected in the Yuba City-Marysville nonattainment area. A limited chemical composition analysis was done on samples collected at the Yuba City-Almond Street monitor (AQS ID: 061010003) in 2004-2006. <sup>54</sup> Archived Teflon filters were analyzed by a combination of X-ray Fluorescence (XRF) to provide elemental concentrations and Ion Chromatography (IC) to estimate ions (sulfate, nitrate, potassium, ammonium, etc.). These data show that PM<sub>2.5</sub> on days with high

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<sup>&</sup>lt;sup>54</sup> Availability of New Speciation Data for Some Areas that EPA Intends to Designate as Nonattainment, Neil Frank, Office of Air Quality Planning and Standards, September 18, 2008 available at <a href="http://www.epa.gov/ttn/naaqs/pm/docs/available\_new\_speciation\_data\_pm2.5\_naa.pdf">http://www.epa.gov/ttn/naaqs/pm/docs/available\_new\_speciation\_data\_pm2.5\_naa.pdf</a>.

concentrations during the cool season<sup>55</sup> was made up of TCM (54%), ammonium nitrate (38%), ammonium sulfate (6%), and crustal materials (2%). See Plan, pp. IV–5 – IV-7.

The Yuba-City Marysville PM<sub>2.5</sub> Plan shows that the PM<sub>2.5</sub> composition on high concentration days likely did not change between 2004-2006 and the emission inventory year 2011. See CARB 2014 Staff Report p. 8-9. FRAQMD argues that while emission reductions have reduced the frequency and magnitude of high concentration day events, there would be little impact on exceedance day composition due to consistent meteorology and control programs targeting all contributors to PM<sub>2.5</sub> mass. As additional evidence, data from the Sacramento-T Street site (AQS ID: 060670010), the closest monitor with routine composition data and similar meteorology, is presented. These data shows that despite decreases in emissions over the years the composition in 2010-2012 was very similar to that in 2004-2006. We find the assumption that the chemical composition was consistent between 2004-2006 and 2011 to be reasonable. FRAQMD used the composition data for 2004-2006 to partition the 2011 DV of 27  $\mu$ g/m³ into its components of 14.6  $\mu$ g/m³ TCM, 10.3  $\mu$ g/m³ ammonium nitrate, 1.6  $\mu$ g/m³ ammonium sulfate, and 0.5  $\mu$ g/m³ crustal materials.

The Yuba City-Marysville PM<sub>2.5</sub> Plan demonstrates that the 2024 maintenance year inventory is well below the 2011 attainment year inventory for NO<sub>x</sub>, the most important PM<sub>2.5</sub> precursor and about equal for direct PM<sub>2.5</sub>, the largest contributor to PM<sub>2.5</sub>. Emissions for SOx are projected to increase, but sulfate is a very small contributor. Emissions for VOC and ammonia, the other potential precursors, are projected to decrease. Table 6 presents a summary of the direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursor emissions estimates for 2011, 2017, and 2024 in the Yuba City-Marysville PM<sub>2.5</sub> Maintenance Plan. Emissions are projected to change between 2011 and

 $^{55}$  Days with concentrations above the  $95^{th}$  percentile of measured  $PM_{2.5}$  during October – April.

2014 for direct PM<sub>2.5</sub> (+3%), NH<sub>3</sub> (-3%), NO<sub>x</sub> (-37%), SO<sub>x</sub> (+61%), and VOCs (-8%). Since current ambient concentrations are well below the NAAQS, the NO<sub>x</sub> decrease together with the slight increase in projected direct PM<sub>2.5</sub> and SO<sub>x</sub> emissions are consistent with maintenance of the NAAQS, as discussed below.

Based on our review of the 2017 and 2024 emissions inventories and related documentation from the Yuba City-Marysville PM<sub>2.5</sub> Plan, we find that the 2017 and 2024 emissions inventories in the Plan reflect the latest planning assumptions and emissions models available at the time the Plan was developed, and provide a comprehensive and reasonably accurate basis upon which to forecast direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursor emissions for years 2017 and 2024. These inventories further support maintenance through 2024.

Table 6. Summary of 2011, 2017 and 2024 Projected PM <sub>2.5</sub> and PM <sub>2.5</sub> Precursor Emissions in the Yuba City-Marysville PM <sub>2.5</sub> Nonattainment Area (tons per day, average winter day), and 2011-2024 Change <sup>a</sup>							
Pollutants	2011	2017	2024	Net Change tpd	Net Change %		
PM <sub>2.5</sub>	5.3	5.5	5.4	0.2	3%		
$NO_x$	19.3	16.0	12.1	-7.2	-37%		
$SO_x$	0.4	0.6	0.6	0.2	61%		
NH <sub>3</sub>	5.0	4.9	4.9	-0.1	-3%		
VOC	14.6	14.2	13.4	-1.2	-8%		

<sup>&</sup>lt;sup>a</sup> Source: Table 1 in CARB's 2014 Staff Report. Net percent change is computed using the original figures having four decimal places, but values 2011, 2017, 2024, and net tpd change are rounded to the nearest tenth of a tpd, and, as a result, adding rounded values may not equal net change in table.

Assuming TCM and crustal material are from directly emitted  $PM_{2.5}$ , a 3% increase in the estimated 2011 TCM ambient contribution (i.e.,  $14.6~\mu g/m^3$ ) corresponds to a  $0.45~\mu g/m^3$  increase in ambient  $PM_{2.5}$ . Ammonium nitrate and ammonium sulfate are secondary PM, that is,

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<sup>&</sup>lt;sup>56</sup> The 2024 emission inventory includes emissions reductions from State measures adopted through June 2011 plus reductions from the Advanced Clean Cars Program. Emails from Kasia Turkiewicz, CARB, to John Ungvarsky, EPA, August 20, 2014, and September 8, 2014.

they are formed from chemical reactions in the air, and so do not necessarily scale one-to-one with the precursor  $NO_x$ ,  $NH_3$ , and  $SO_x$  emissions. Assuming a conservative one-to-one  $SO_x$  to ammonium sulfate, a 61% increase in  $SO_x$  corresponds to a 1.0  $\mu$ g/m³  $PM_{2.5}$  increase.  $NO_x$  emissions are projected to decrease by 37% and  $NH_3$  is projected to decrease by 3%. FRAQMD assumes a one-to-one  $NO_x$  to ammonium nitrate resulting in a 3.8  $\mu$ g/m³  $PM_{2.5}$  decrease. The amount of  $NO_x$  to ammonium nitrate formation, however, can vary depending on a number of chemical and meteorological factors. Photochemical modeling for the Sacramento region shows that a 1% change in  $NO_x$  causes only a 0.7% change in ammonium nitrate. See 78 FR 44494 at 59261 (July 24, 2013). Using this assumption, the 37%  $NO_x$  decrease results in a 2.7  $\mu$ g/m³  $PM_{2.5}$  decrease. Taken together, the changes in precursor emissions from 2011 to 2024 result in an overall decrease of 1.25  $\mu$ g/m³ in the DV. See Plan, Table VI-4 p. VI-3.

The results of the proportional roll-back analysis show that the Yuba City-Marysville  $PM_{2.5}$  nonattainment area will be well below the 24-hour  $PM_{2.5}$  NAAQS in 2024, with the projected DV of 25.75  $\mu g/m^3$ . This is higher than the 24.6  $\mu g/m^3$  in the Plan (based on a one-to-one ammonium nitrate response to  $NO_x$  reductions), but is still well below the NAAQS. The effects of the declining  $NO_x$  outweigh slight increases in direct  $PM_{2.5}$  and  $SO_x$ .

For the above reasons, EPA believes the area will continue to maintain the 2006 24-hour PM<sub>2.5</sub> NAAQS at least through 2024 and that the Yuba City-Marysville PM<sub>2.5</sub> Maintenance Plan shows maintenance for a period of ten years following redesignation. Thus, EPA proposes approval of the Yuba City-Marysville PM<sub>2.5</sub> Maintenance Plan in 2014, based on a showing, in accordance with section 175A, that the Yuba City-Marysville PM<sub>2.5</sub> Maintenance Plan provides for maintenance for at least ten years after redesignation.

3. Maintenance Plan and Evaluation of VOC and Ammonia Precursors

With regard to the redesignation of Yuba City-Marysville nonattainment area, in evaluating the effect of the Court's remand of EPA's implementation rule, which included presumptions against consideration of VOC and ammonia as PM<sub>2.5</sub> precursors, EPA in this proposal is also considering the impact of the decision on the maintenance plan required under sections 175A and 107(d)(3)(E)(iv). To begin with, EPA notes that the area has attained the 2006 24-hour PM<sub>2.5</sub> standard and that the State has shown that attainment of that standard is due to permanent and enforceable emission reductions.

EPA proposes to determine that the State's maintenance plan shows continued maintenance of the 2006 24-hour PM<sub>2.5</sub> standard by tracking the levels of the precursors whose control brought about attainment of the 2006 24-hour PM<sub>2.5</sub> standard in the Yuba City-Marysville nonattainment area. EPA, therefore, believes that the only additional consideration related to the maintenance plan requirements that results from the Court's January 4, 2013 decision is that of assessing the potential role of VOC and ammonia in demonstrating continued maintenance in this area. As explained below, based upon documentation provided by the State and supporting information, EPA believes that the maintenance plan for the Yuba City-Marysville nonattainment area need not include any additional emission reductions of VOC or ammonia in order to provide for continued maintenance of the 2006 24-hr PM<sub>2.5</sub> standard.

First, as noted above in EPA's discussion of section 189(e), VOC emission levels in this area have historically been controlled under SIP requirements related to ozone and other pollutants, and the area has no major stationary sources of ammonia. Second and as described below, available information shows that precursor emissions, including VOC and ammonia, are not expected to increase over the maintenance period so as to interfere with or undermine the State's maintenance demonstration.

In the Yuba City-Marysville nonattainment area, emissions of NO<sub>x</sub>, NH<sub>3</sub>, and VOC are projected to decrease over the maintenance period for the 2006 24-hour PM<sub>2.5</sub> standard. See Tables 5 and 6. Given that the Yuba City-Marysville nonattainment area is already attaining the 2006 24-hour PM<sub>2.5</sub> NAAQS even with the current level of emissions from sources in the area, the downward trend of emissions inventories would be consistent with continued attainment. Indeed, projected emissions reductions for the precursors that the State is addressing for purposes of the 2006 24-hour PM<sub>2.5</sub> standard indicate that the area should continue to attain the standard following the precursor control strategy that the State has already elected to pursue. Even though direct PM<sub>2.5</sub> and SO<sub>x</sub> are both projected to marginally increase by 0.2 tpd between 2011 and 2024, the overall emissions reductions projected in NO<sub>x</sub>, NH<sub>3</sub>, and VOC would be sufficient to offset the very small increase in direct PM<sub>2.5</sub> and SO<sub>x</sub>. For these reasons, EPA believes that emissions from potential PM<sub>2.5</sub> precursors will not cause monitored PM<sub>2.5</sub> levels to violate the 2006 24-hour PM<sub>2.5</sub> standard during the maintenance period. In addition, the 2011-2013 design value for the area is 29  $\mu g/m^3$ , which is well below the 2006 24-hour  $PM_{2.5}$  standard of 35  $\mu g/m^3$ . Given that precursor emissions are projected to decrease through 2024, it is reasonable to conclude that monitored PM<sub>2.5</sub> levels in this area will also continue to decrease through 2024.

Thus, EPA believes that there is ample justification to conclude that the Yuba City-Marysville nonattainment area should be redesignated, even taking into consideration the emissions of other precursors potentially relevant to PM<sub>2.5</sub>. Even if the requirements of section 189(e) were deemed applicable at the time the State submitted the redesignation request, and for the reasons set forth in this notice, EPA proposes to approve the State's maintenance plan and its request to redesignate the Yuba City-Marysville nonattainment area to attainment for the 1997 PM<sub>2.5</sub> annual standard.

#### 4. Verification of Continued Attainment

In demonstrating maintenance, continued attainment of the NAAQS can be verified through operation of an appropriate air quality monitoring network. The Calcagni memorandum states that the maintenance plan should contain provisions for continued operation of air quality monitors that will provide such verification. Calcagni memorandum, p. 11. As discussed in section VI.A of this document, PM<sub>2.5</sub> is currently monitored by CARB within the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area. In the Yuba City-Marysville PM<sub>2.5</sub> Plan (see Plan, p. VII-1), the District indicates it will work with CARB in the continued operation of the Yuba City-Marysville monitoring site (i.e., AQS site 06-101-0003) and maintain compliance with federal requirements in 40 CFR Part 58. The Plan also indicates that CARB intends to maintain an appropriate PM<sub>2.5</sub> monitoring network through the maintenance period. We find that the Yuba City-Marysville PM<sub>2.5</sub> Plan contains adequate provisions for continued operation of air quality monitors that will provide verification of continued attainment.

Second, the transportation conformity process, which would require a comparison of on-road motor vehicle emissions that would occur under new or amended regional transportation plans and programs with the MVEBs in the Plan, represents another means by which to verify continued attainment of the 2006 24-hour PM<sub>2.5</sub> NAAQS in Yuba City-Marysville nonattainment area.

Lastly, CARB and FRAQMD must inventory emissions sources and report to EPA on a periodic basis under 40 CFR part 51, subpart A ("Air Emissions Reporting Requirements"). These emissions inventory updates will provide a third way to evaluate emissions trends in the area and thereby verify continued attainment of the NAAQS. These methods are sufficient for the purpose of verifying continued attainment.

## 5. Contingency Provisions

Section 175A(d) of the CAA requires that maintenance plans include contingency provisions, as EPA deems necessary, to promptly correct any violations of the NAAQS that occur after redesignation of the area. Such provisions must include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned that were contained in the SIP for the area before redesignation of the area as an attainment area. These contingency provisions are distinguished from those generally required for nonattainment areas under section 172(c)(9) in that they are not required to be fully-adopted measures that will take effect without further action by the state in order for the maintenance plan to be approved. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered by a specified event.

Under section 175A(d), contingency measures identified in the contingency plan do not have to be fully adopted at the time of redesignation. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered by a specified event. The maintenance plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific timeline for action by the State. As a necessary part of the plan, the State should also identify specific indicators or triggers, which will be used to determine when the contingency measures need to be implemented.

As required by section 175A of the CAA, FRAQMD has adopted a contingency plan to address possible future PM<sub>2.5</sub> air quality problems. The contingency provisions in the Yuba City-Marysville PM<sub>2.5</sub> Plan are contained in section VII of the Plan and were clarified in a subsequent

letter from the District.<sup>57</sup> In the Yuba City-Marysville PM<sub>2.5</sub> Plan, FRAQMD identifies the contingency plan trigger as a violation of the 2006 24-hour PM<sub>2.5</sub> NAAQS. If that should occur, FRAQMD commits to the following steps.

- (1) Within 60 days of the trigger, FRAQMD will commence an analysis to determine if the violation was caused by a natural event or instrument malfunction, and evaluate meteorological conditions and emissions inventory.
- (2) FRAQMD will consult with interested parties, community organizations, and industry to identify and implement, within nine months after the trigger, voluntary and incentive measures to reduce directly emitted  $PM_{2.5}$ .
- (3) If the violation occurred because of emissions from sources within Sutter or Yuba counties, the FRAQMD will promptly adopt and implement, no later than 18-24 months after the violation, new or revised measures necessary to ensure attainment. The measures that FRAQMD would consider and analyze are listed in Table 7. Additional rules may be considered depending on the cause of the violation of the 2006 24-hour PM<sub>2.5</sub> standard.

Table 7. Measures for Consideration and Analysis in Step 3 of the FRAQMD					
Contingency Plan.					
Source Category	Control Measures				
Stationary Sources	Combustion Devices (boilers, incinerators, engines, and turbines)				
	Industrial Processes (manufacturing, industrial,				
	agricultural, oil and gas)				
Opening Burning Restrictions	Managed Burning (agricultural and residential opening				
	burning)				
	Prescribed Burning				
Fugitive Dust	Paved Roads (truck covering, construction site				
	measures, storm water drainage)				
	Unpaved Roads (paving and surface improvements,				
	chemical stabilization, speed reduction)				
	Construction and Demolition (truck covering, access				

<sup>&</sup>lt;sup>57</sup> Letter from Christopher D. Brown, Air Pollution Control Officer, FRAQMD, to Deborah Jordan, Director, Air Division, US EPA, Region 9, and Richard W. Corey, Executive Officer, CARB, dated December 19, 2013.

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	areas, watering)
	Storage Piles (wet suppression and dust control)
	Agricultural Processes (reducing dust from tilling,
	harvesting, processing; also conservation)
Opacity Restrictions	Visible emissions limitations
Residential Wood Burning Devices	Mandatory curtailment, conversion/upgrade of existing
	devices, restrictions on new devices

In their December 19, 2013 letter, FRAQMD clarified that all three of the aforementioned steps will be completed, including the implementation of additional control measures, within 18-24 months of trigger activation.

Upon our review of the Plan, as summarized above, we find that the contingency provisions of the Yuba City-Marysville PM<sub>2.5</sub> Plan clearly identify specific contingency measures, contain tracking and triggering mechanisms to determine when contingency measures are needed, contain a description of the process of recommending and implementing contingency measures, and contain specific timelines for action. Thus, we conclude that the contingency provisions of the Yuba City-Marysville PM<sub>2.5</sub> Plan are adequate to ensure prompt correction of a violation and therefore comply with section 175A(d) of the CAA. For the reasons set forth above, EPA is proposing to find that the Yuba City-Marysville PM<sub>2.5</sub> Plan is consistent with the maintenance plan contingency provision requirements of the CAA and EPA guidance.

- 6. Transportation Conformity and Motor Vehicle Emissions Budgets
- a. Requirements for Transportation Conformity and Motor Vehicle Emissions Budgets

Under section 176(c) of the CAA, transportation plans, programs and projects in the nonattainment or maintenance areas that are funded or approved under title 23 U.S.C. and the Federal Transit Laws (49 U.S.C. chapter 53) must conform to the applicable SIP. In short, a transportation plan and program are deemed to conform to the applicable SIP if the emissions resulting from the implementation of that transportation plan and program are less than or equal

to the motor vehicle emissions budgets (budgets) established in the SIP for the attainment year, maintenance year and other years. See, generally, 40 CFR part 93 for the federal conformity regulations and 40 CFR 93.118 specifically for how budgets are used in conformity.

The budgets serve as a ceiling on emissions that would result from an area's planned transportation system. The budget concept is further explained in the preamble to the November 24, 1993, transportation conformity rule (58 FR 62188). Maintenance plan submittals must specify the maximum emissions of transportation-related PM<sub>2.5</sub> and NO<sub>x</sub> emissions allowed in the last year of the maintenance period, i.e., the motor vehicle emissions budgets (MVEBs). (MVEBs may also be specified for additional years during the maintenance period.) The submittal must also demonstrate that these emissions levels, when considered with emissions from all other sources, are consistent with maintenance of the NAAQS.

b. Motor Vehicle Emissions Budgets in the Yuba City-Marysville PM<sub>2.5</sub> Plan

The Yuba City-Marysville PM<sub>2.5</sub> Plan contains PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs for the Yuba CityMarysville PM<sub>2.5</sub> nonattainment area for 2017 and 2024. The MVEBs are the on-road mobile source primary PM<sub>2.5</sub> and NO<sub>x</sub> (as a PM<sub>2.5</sub> precursor) emissions for Yuba City-Marysville nonattainment area for 2017 and 2024. The derivation of the MVEBs is discussed in section VIII of the Yuba City-Marysville PM<sub>2.5</sub> Plan and in SACOG's Regional Planning Partnership Action Item #3, February 20, 2013.<sup>58</sup>

The details for each component of the budgets are shown in Table 9 and are comprised of direct on-road mobile source emissions, safety margins, and an adjustment for reductions from the State's Advanced Clean Car Program. Direct PM<sub>2.5</sub> emissions from road construction, paved roads and unpaved roads were evaluated by FRAQMD and determined to not be a significant

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<sup>&</sup>lt;sup>58</sup> Included in the docket for this action.

contributor to the  $PM_{2.5}$  nonattainment problem, and, as such, do not need to be evaluated as part of a conformity determination.<sup>59</sup> See 40 CFR 93.124(a). A state may choose to apply a safety margin under our transportation conformity rule so long as such margins are explicitly quantified in the applicable plan and are shown to be consistent with attainment or maintenance of the NAAQS (whichever is relevant to the particular plan). <sup>60</sup> In this instance, the safety margin has been explicitly quantified and shown to be consistent with continued maintenance of the PM<sub>2.5</sub> NAAQS through the applicable maintenance period, through 2024. The State's MVEB analysis considered: (1) on-road motor vehicle emission inventory factors of EMFAC2011; and (2) updated recent vehicle activity data from SACOG's Sacramento Activity-Based Travel Demand Simulation Model transportation modeling system.

Table 9: Source Categories and Emissions Comprising the Motor Vehicle Emissions Budgets (tons per day, average winter day)							
Category 2017 2024							
	$NO_x$	PM <sub>2.5</sub>	$NO_x$	$PM_{2.5}$			
On-road emissions inventory <sup>a</sup>	4.6	0.15	2.7	0.15			
Safety Margin 0.7 - 0.5							
Advanced Clean Car Program Adjustment	0.0	-	-0.1	-			
Totals	5.3	0.2	3.1	0.2			

<sup>&</sup>lt;sup>a</sup> Rounded up to nearest tenth of a ton, includes PM<sub>2.5</sub> from tire and brake wear.

# c. Initial Adequacy Review of Budgets

On May 20, 2014, EPA announced the availability of the Yuba City-Marysville PM<sub>2.5</sub> Plan with MVEBs and a 30-day public comment period on EPA's Adequacy Web site at: http://www.epa.gov/otaq/stateresources/transconf/reg9sips.htm#ca. The comment period for this notification ended on June 19, 2014, and EPA received no comments from the public. On August 25, 2014, EPA published in the Federal Register (79 FR 50646) a finding of adequacy for the

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 $<sup>^{59}</sup>$  See section VIII.c. in the Yuba City-Marysville PM<sub>2.5</sub> Plan  $^{60}$  See 40 CFR 93.124(a).

PM<sub>2.5</sub> MVEBs for the years 2017 and 2024. The new MVEBs became effective on September 9, 2014. After the effective date of the adequacy finding, the new MVEBs must be used in future transportation conformity determinations in the Yuba City-Marysville nonattainment area. EPA is not required under its transportation conformity rule to find budgets adequate prior to proposing approval of them, but in this instance, we have completed the adequacy review of these budgets prior to our action on the Yuba City-Marysville PM<sub>2.5</sub> Plan.

#### d. Proposed Actions on the Budgets

EPA is proposing to approve the MVEBs for 2017 and 2024 as part of our approval of Yuba City-Marysville PM<sub>2.5</sub> Plan. EPA has determined that the MVEB emission targets are consistent with emission control measures in the SIP and that Yuba City-Marysville nonattainment area can maintain attainment of the 24-hour PM<sub>2.5</sub> NAAQS. Because the budgets EPA found adequate in 79 FR 50646 (August 25, 2014) are the same budgets EPA is proposing to approve in this action, if EPA approves the MVEBs in the final rulemaking action, it would not change the budgets currently in use for future transportation conformity determinations for Yuba City-Marysville County. As discussed in section V.D.2 of this notice, EPA is proposing that if this approval is finalized in 2014 the area will continue to maintain the 2006 24-hour PM<sub>2.5</sub> NAAQS through at least 2024. Consistent with this proposal, EPA is proposing to approve the MVEBs submitted by the State in the Yuba City-Marysville PM<sub>2.5</sub> Plan. EPA is proposing that the submitted budgets are consistent with maintenance of the 2006 24-hour PM<sub>2.5</sub> NAAQS through 2024.

## VII. Proposed Action and Request for Public Comment

Based on our review of the Yuba City-Marysville PM<sub>2.5</sub> Plan submitted by the State, air quality monitoring data, and other relevant materials, EPA is proposing to find that the State has addressed all the necessary requirements for redesignation of the Yuba City-Marysville

nonattainment area to attainment of the PM<sub>2.5</sub> NAAQS, pursuant to CAA sections 107(d)(3)(E) and 175A.

First, under CAA section 107(d)(3)(D), we are proposing to approve CARB's request, which accompanied the submittal of the Yuba City-Marysville PM<sub>2.5</sub> Plan, to redesignate the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area to attainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS. We are doing so based on our conclusion that the area has met the five criteria for redesignation under CAA section 107(d)(3)(E). Our conclusion is based on our proposed determination that the area has attained the 2006 24-hour PM<sub>2.5</sub> NAAQS; that relevant portions of the California SIP are fully approved; that the improvement in air quality is due to permanent and enforceable reductions in emissions; that California has met all requirements applicable to the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area with respect to section 110 and part D of the CAA; and is based on our proposed approval of the Yuba City-Marysville PM<sub>2.5</sub> Plan as part of this action.

Second, in connection with the Yuba City-Marysville PM<sub>2.5</sub> Plan showing maintenance through 2024, EPA is proposing to find that the maintenance demonstration, which documents how the area will continue to attain the 2006 24-hour PM<sub>2.5</sub> NAAQS for 10 years beyond redesignation (i.e., through 2024) and the actions that FRAQMD will take if a future monitored violation triggers the contingency plan, meets all applicable requirements for maintenance plans and related contingency provisions in section 175A of the CAA. EPA is also proposing to approve the motor vehicle emissions budgets in the Yuba City-Marysville PM<sub>2.5</sub> Plan because we find they meet the applicable transportation conformity requirements under 40 CFR 93.118(e). Lastly, EPA is proposing to approve the 2011 inventory, which serves as the Yuba City-Marysville PM<sub>2.5</sub> Plan's attainment year inventory, as satisfying the requirements of section 172(c)(3) of the CAA.

We are soliciting comments on these proposed actions. We will accept comments from the public on this proposal for 30 days following publication of this proposal in the <u>Federal Register</u>. We will consider these comments before taking final action.

# **VIII. Statutory and Executive Order Reviews**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by State law. Redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. Accordingly, these actions merely propose to approve a State plan and redesignation request as meeting federal requirements and do not impose additional requirements beyond those by State law. For these reasons, these proposed actions:

- Are not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Do not impose an information collection burden under the provisions of the Paperwork
   Reduction Act (44 U.S.C. 3501 et seq.);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Do not contain any unfunded mandate or significantly or uniquely affect small

governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);

- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Are not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Do not provide EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law. There are no federally recognized tribes located within the Yuba City-Marysville PM<sub>2.5</sub> nonattainment area.

## **List of Subjects**

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference,

Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Dated: September 29, 2014. Jared Blumenfeld,

Regional Administrator,

Region IX.

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Publication Date: 10/15/2014]